December 31, 2019

Darrell R. Willson

Administrator

National Gallery of Art

2000-B South Club Drive

Landover, MD 20785

**RE: Permit Nos. 7270 through 7275 to Construct and Operate Six Natural Gas-Fired Boilers at the National Gallery of Art, 6th Street and Constitution Avenue NW, Washington, DC**

Dear Mr. Willson:

Pursuant to sections 200.1 and 200.2 of Title 20 of the District of Columbia Municipal Regulations (20 DCMR), a permit from the Department of Energy and Environment (“the Department”) shall be obtained before any person can construct and operate a stationary source in the District of Columbia. The applications of National Gallery of Art (“the Permittee”) to construct and operate the six (6) natural gas-fired Fulton Vantage VTG-6000 condensing boilers located at 6th Street and Constitution Avenue NW, Washington, DC have been reviewed:

| **Emission Unit ID** | **Model Number** | **Natural Gas Input Rating (MMBTU/hr)** | **Permit Number** |
| --- | --- | --- | --- |
| Boiler 1 - B1 | Fulton Vantage VTG-6000 | 6.0 | 7270 |
| Boiler 2 - B2 | Fulton Vantage VTG-6000 | 6.0 | 7271 |
| Boiler 3 - B3 | Fulton Vantage VTG-6000 | 6.0 | 7272 |
| Boiler 4 - B4 | Fulton Vantage VTG-6000 | 6.0 | 7273 |
| Boiler 5 - B5 | Fulton Vantage VTG-6000 | 6.0 | 7274 |
| Boiler 6 - B6 | Fulton Vantage VTG-6000 | 6.0 | 7275 |

Based on the plans and specifications as detailed in the air permit applications received on September 4, 2019, the applications are hereby approved, and the construction and operation of the National Gallery of Art boilers are permitted, subject to the following conditions:

I. General Requirements:

* 1. This approval is issued pursuant to the air pollution control requirements of the applicable sections of 20 DCMR for the construction and operation of the boilers.

b. This set of permits will expire on December 30, 2024. If continued operation after this date is desired, the Permittee shall submit an application for renewal by September 30, 2024. [20 DCMR 200.4]

c. Construction or operation of equipment under the authority of this set of permits shall be considered acceptance of its terms and conditions.

1. The Permittee shall allow authorized officials of the District, upon presentation of identification, to:

1. Enter upon the Permittee’s premises where a source or emission unit is located, an emissions related activity is conducted, or where records required by this permit are kept;

2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of this permit;

3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and

4. Sample or monitor, at reasonable times, any substance or parameter for the purpose of assuring compliance with this permit or any applicable requirement.

1. This set of permits shall be kept on the premises and produced upon request.
2. Failure to comply with the provisions of this permit may be grounds for suspension or revocation. [20 DCMR 202.2]

II. Emission Limitations:

* 1. Each of the six (6) 6.0 MMBTU per hour natural gas fired boilers shall not emit pollutants in excess of those specified in the following table [20 DCMR 201]: *Note that, unless other credible evidence of a violation, such as test results required under Condition IV(a), are identified, compliance with Condition III(a) of this permit will be considered compliance with this condition.*

|  |
| --- |
| **Boiler Emission Limits** |
| **Pollutant** | **Short-Term Limit (lb/hr)** |
| Carbon Monoxide (CO) | 0.22 |
| Oxides of Nitrogen (NOx) | 0.22 |
| Total Particulate Matter (PM Total) | 0.05 |
| Sulfur Dioxide (SO2) | 0.004 |

\*PM Total includes both filterable and condensable fractions.

* 1. b. Visible emissions shall not be emitted into the outdoor atmosphere from the boilers, except that discharges not exceeding forty percent (40%) opacity (unaveraged) shall be permitted for two (2) minutes in any sixty (60) minute period and for an aggregate of twelve (12) minutes in any twenty-four hour (24 hr.) period during start-up, cleaning, adjustment of combustion controls, or malfunction of the equipment [20 DCMR 606.1]

*Note that 20 DCMR 606 is subject to an EPA-issued call for a State Implementation Plan (SIP) revision (known as a “SIP call”) requiring the District to revise 20 DCMR 606. See “State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA’s SSM Policy Applicable to SIPs; Findings of Substantial Inadequacy; and SIP Calls To Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction”, 80 Fed. Reg. 33840 (June 12, 2015). It is likely that this federal action will result in changes to the requirements of 20 DCMR 606. Any such changes, once finalized in the DCMR, will supersede the language of Condition II(b) as stated above.*

1. An emission into the atmosphere of odorous or other air pollutants from any source in any quantity and of any characteristic, and duration which is, or is likely to be injurious to the public health or welfare, or which interferes with the reasonable enjoyment of life or property is prohibited. [20 DCMR 903.1]
2. Total suspended particulate matter (TSP) emissions from each of the boilers shall not exceed 0.11 pound per million BTU. [20 DCMR 600.1] *Note that, unless other credible evidence of a violation, such as test results required under Condition IV(a), are identified, compliance with Condition III(a) of this permit will be considered compliance with this condition.*

III. Operational Limitations:

* 1. a. The only fuel permitted for use in the boilers shall be natural gas. [20 DCMR 201]. No secondary fuel is permitted.

b. The boilers shall be operated at all times in a manner consistent with the manufacturer’s specifications for the equipment. [20 DCMR 201]

c. At all times, including periods of startup, shutdown, and malfunction, the owner or operator shall, to the extent practicable, maintain and operate each boiler in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating procedures are being used will be based on information available to the Department which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [20 DCMR 201]

IV. Monitoring and Testing Requirements:

a. The Permittee shall conduct and allow the Department access to conduct tests of air pollution emissions from any source as requested. [20 DCMR 502.1]

b. If the Department requests testing of this equipment in accordance with Condition IV(a), the Permittee shall conduct performance testing on the boilers to determine compliance with Conditions II(a) (except SO2) and (d) (or as otherwise directed by the Department) and shall furnish the Department with a written report of the results of such performance test in accordance with the following requirements [20 DCMR 502]:

1. One (1) original test protocol shall be submitted to the following address a minimum of thirty (30) days in advance of the proposed test date. The test shall be conducted in accordance with Federal and District requirements.

Chief, Compliance and Enforcement Branch

Department of Energy and Environment

Air Quality Division

1200 First Street NE, 5th Floor

Washington, DC 20002

2. The test protocol and test date(s) shall be approved by the Department prior to initiating any testing. The Department must have the opportunity to observe the test for the results to be considered for acceptance.

3. The final results of the testing shall be submitted to the Department within sixty (60) days of the test completion. One (1) original copy of the test report shall be submitted to the address in Condition IV(b)(1) above.

4. The final report of the results shall include the emissions test report (including raw data from the test) as well as a summary of the test results and a statement of compliance or non-compliance with permit conditions to be considered valid. The summary of results and statement of compliance or non-compliance shall contain the following information:

A. A statement that the Permittee has reviewed the report from the emissions testing firm and agrees with the findings.

B. Permit number(s) and condition(s) which are the basis for the compliance evaluation.

C. Summary of results with respect to the permit condition.

D. Statement of compliance or non-compliance with each permit condition.

5. The results must demonstrate to the Department’s satisfaction that the emission unit is operating in compliance with the applicable regulations and conditions of this permit; if the final report of the test results shows non-compliance the Permittee shall propose corrective action(s). Failure to demonstrate compliance through the test may result in enforcement action.

c. At least once per quarter, during operation of each boiler, the Permittee shall conduct visual observations of the emissions from that boiler. If no operations are occurring for a given boiler during a given quarter, this shall be so noted. If emissions are visible, the Permittee shall make arrangements for prompt visible emissions testing by a person certified in accordance with EPA Reference Method 9 (40 CFR 60, Appendix A). Such a test shall consist of a minimum of 30 minutes of opacity observations for the boiler in question.

d. Regardless of whether or not emissions are observed pursuant to Condition IV(c) of this permit, the Permittee shall conduct a minimum of one visible emissions test of each boiler each year. Such a test program shall consist of a minimum of 30 minutes of opacity observations of each boiler and shall be performed by a person certified in accordance with EPA Reference Method 9 (40 CFR 60, Appendix A).

V. Record Keeping and Reporting Requirements:

a. The Permittee shall keep records of the results of all emissions testing required for the

 boilers pursuant to Conditions IV(a) and (b) of this permit for a period of not less than three (3) years from the date of the testing. [20 DCMR 201 and 20 DCMR 500.8]

b. The Permittee shall maintain records of all visible emissions monitoring performed pursuant to Condition IV(c), for a period of not less than three (3) years, including notes indicating when no observations were performed as a result of not operating of the boiler that quarter. These records shall be maintained in an organized fashion, shall include the identity of the person performing the monitoring, and shall be readily available for inspection by the Department. [20 DCMR 500.8]

c. The Permittee shall maintain records of all Method 9 visible emissions testing performed pursuant to Conditions IV(c) and (d) for a period of not less than three (3) years from the date of the testing. These records shall also include the identity of the person performing the visible emissions testing and documentation of his/her Method 9 certification. These records shall include documentation indicating whether the results show compliance with Condition II(b). [20 DCMR 500.8]

1. The Permittee shall maintain records of the amount of fuel used each month in the boilers. These data shall be maintained in a rolling twelve-month sum format and records shall be maintained for a period of not less than three (3) years from the date of each record. These data need not be maintained separately for each boiler, but may alternatively be maintained in aggregate if fuel meters are not maintained on each unit. [20 DCMR 500.8]

If you have any questions, please call me at (202) 535-1747 or Thomas Olmstead at (202) 535-2273.

Sincerely,

Stephen S. Ours, P.E.

Chief, Permitting Branch

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