June 21, 2023

Donovan Atwell

Maintenance Manager

Smith Property Holdings Five DC LP

4501 Connecticut Avenue NW

Washington, DC 20008

**RE: Permit Nos. 7348 and 7349 to Operate Two Dual-Fuel Boilers (Boiler 1 and Boiler 2) Located at Avalon the Albemarle, 4501 Connecticut Avenue NW, Washington DC**

Dear Donovan Atwell:

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 application of Smith Property Holdings Five DC LP (the Permittee) to operate two (2) identical boilers, listed in the table below, located at 4501 Connecticut Avenue NW, Washington, DC 20008 has been reviewed:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ID Number** | **Model** | **Serial No.** | **Natural Gas Rating (MMBTU/hr)** | **No. 2 Fuel Oil Rating (MMBTU/hr)** | **Permit Number** |
| Boiler 1 | CB.300-200 | L-77070 | 8.369 | 8.165 | 7348 |
| Boiler 2 | CB.300-200 | L-81562 | 8.369 | 8.165 | 7349 |

Based on the plans and specifications as detailed in the air permit applications received on April 11, 2023, the applications are hereby approved, and the operation of the 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 June 20, 2028. If continued operation after this date is desired, the Permittee shall submit applications for renewal by March 20, 2028. [20 DCMR 200.4]

c. 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 permit 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 boilers (identified as Boiler 1 and Boiler 2) 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), (b) and (d) of this permit will be considered compliance with this condition.*

|  |  |  |
| --- | --- | --- |
| **Pollutant** | **Short-Term Limit** **(Natural Gas) (lb/hr)** | **Short-Term Limit (No. 2 Fuel Oil) (lb/hr)** |
| Carbon Monoxide (CO) | 0.69 | 0.28 |
| Oxides of Nitrogen (NOx) | 0.82 | 1.12 |
| Total Particulate Matter (PM Total)\* | 0.06 | 0.19 |
| Sulfur Dioxide (SO2) | 0.01 | 0.01 |

\*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. Total suspended particulate matter (TSP) emissions from the each of the boilers shall not be greater than 0.11 pounds 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), (b), and (d) of this permit will be considered compliance with this condition.*

d. 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]

III. Operational Limitations:

* 1. a. The primary fuel for the boilers shall be natural gas. No. 2 fuel oil shall only be used in accordance with Conditions III(b) and (c). No other fuels are approved for use in these boilers. [20 DCMR 201]
	2. The alternative fuel for the boilers shall be No. 2 fuel oil. The Permittee shall not purchase No. 2 fuel oil containing more than 0.0015 percent sulfur (15 ppm) by weight for use in the boilers. [20 DCMR 801.3 and 40 CFR 60.42c(d)] *Note that this is a streamlined permit condition. This limit established is based on the requirement of 20 DCMR 801.3 and is more stringent than the requirements 40 CFR 60.42c(d). Therefore, compliance with this limitation will ensure compliance with both standards.*
	3. The boilers shall only operate on No. 2 fuel oil for the following reasons: [20 DCMR 201, 40 CFR 63.11195(e) and 40 CFR 63.11237]
		1. During periods of gas curtailment;
		2. During periods of gas supply interruption; or
		3. For periodic testing, maintenance, or operator training on liquid fuel not to exceed a combined total of 48 hours (per boiler) during any calendar year.
	4. The boilers shall be maintained and operated at all times in a manner consistent with the manufacturer’s specifications for the equipment. [20 DCMR 201]
	5. At all times, including periods of startup. Shutdown. And malfunction, the Permittee 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. In addition to any specific testing requirements specified in this permit, the Department reserves the right to require that the Permittee perform additional emission tests on the boilers for any reasonable purpose, using methods approved in advance by the Department. [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), (b), and (c), or a subset of these requirements as requested, 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. A test protocol shall be submitted in electronic form to air.quality@dc.gov 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.

2. The test protocol and date 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 and an electronic copy of the of test report shall be submitted to the following addresses:

Chief, Compliance and Enforcement Branch

Department of Energy and Environment

Air Quality Division

1200 First Street NE, 5th Floor

Washington DC 20002

and

air.quality@dc.gov

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 when operating on natural gas and once per week when operating on No. 2 fuel oil, during operation of the equipment, the Permittee shall observe each stack for a period of at least three minutes. Such visible emissions observations need not be performed in accordance with EPA Reference Method 9 (40 CFR 60, Appendix A), but may instead be only observations for the presence or absence of visible emissions (similar to the procedures set forth in EPA Reference Method 22). If any unit is not used during a given month, this shall be so noted and such records shall be maintained in accordance with Condition V(c).

If visible emissions are observed by this monitoring, or at any other time, the Permittee shall either shut the process down and make the necessary repairs/adjustments to correct the cause of the visible emissions or shall make arrangements for prompt observation by an individual certified in accordance with EPA Reference Method 9 to determine compliance with Condition II(b).

1. Regardless of whether 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 the boiler and shall be performed by a person certified in accordance with EPA Reference Method 9 (40 CFR 60, Appendix A).
2. To show compliance with the SO2 limit in Condition II(a) and the sulfur content requirement of Condition III(b), the Permittee shall sample and test the fuel oil burned in the boilers at least once each calendar quarter or at the time of each fuel delivery, whichever is less frequent. For each sample, the Permittee must provide: [20 DCMR 502]
	* 1. The fuel oil type and the ASTM method used to determine the type (see the definition of distillate oil in 40 CFR 60.41c for appropriate ASTM methods);
		2. The weight percent sulfur of the fuel oil as determined using ASTM test method D-4294 or D-5453 or other method approved in advance by the Department;
		3. The date and time the sample was taken;
		4. The name, address, and telephone number of the laboratory that analyzed the sample; and
		5. The type of test or test method performed.

In lieu of sampling and testing fuel oil each quarter for each of these data, the Permittee may obtain any or all of this data from the fuel oil supplier at the time of delivery and submit fuel receipts and fuel supplier certifications for all fuel deliveries that provide all of the above quality of fuel data (or those for which sampling and testing was not performed at the time delivery) as well as the name of the fuel oil supplier, the date of delivery, and the sulfur content of the oil.

Note that the sulfur content data obtained from the fuel supplier must be the results of specific tests of the fuel at hand or the most recent representative fuel analysis from the fuel terminal prior to the fuel supplier obtaining the fuel for delivery to the Permittee, if such terminal analyses are performed on at least a monthly basis. General fuel specifications are not acceptable for this datum.

Terminal specifications (with references to appropriate ASTM methods as defined above) may be used to document the fuel oil type if the fuel supplier provides written certification that this was the material purchased from the terminal and delivered to the facility. If this method of determining the fuel oil type is used, the Department may opt to require occasional supplemental sampling and testing of the fuel oil to confirm these certifications.

If any of this data cannot be obtained from the fuel supplier, it is the responsibility of the Permittee to sample the fuel and have it analyzed to obtain the required data.

* 1. The Permittee shall monitor the circumstances and the number of hours each boiler operates using No. 2 fuel oil each time it is burned to ensure compliance with the requirements of Condition III(c).

V. Record Keeping and Reporting Requirements:

The Permittee shall maintain the following records for a period of not less than three (3) years from the date of each test, monitoring, sample measurement, report, application, or other activity. Such records must be kept in a form suitable and readily available for expeditious review. [20 DCMR 500.2 and 500.8]

a. The Permittee shall keep records of the results of all emissions testing required for each boiler pursuant to Conditions IV(a) and (b) of this permit;

* 1. The Permittee shall maintain records of all visible emissions monitoring performed pursuant to Condition IV(c), including notes indicating when no observations were performed as a result of no operations 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;
	2. The Permittee shall maintain records of all EPA Reference Method 9 visible emissions testing performed pursuant to Conditions IV(c) and (d). 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 of his/her EPA Reference Method 9 certification. These records shall include documentation indicating whether the results show compliance with Condition II(b);
	3. The Permittee shall keep records of the results of all fuel sulfur testing and fuel supplier certifications obtained pursuant to Condition IV(e); and
	4. The Permittee shall maintain records of all instances of each boiler operation using No. 2 fuel oil, including the reason for operation using that fuel, the identity of the boiler(s) in which it is burned, and the number of hours each of the boilers are operated using that fuel. These data shall be maintained in a rolling twelve-month sum format for each boiler.

If you have any questions, please call me at (202) 535-1747 or Wyatt Bohmann at (202) 309-6112.

Sincerely,

Stephen S. Ours, P.E.

Chief, Permitting Branch

SSO:WEB