April 19, 2016

R. Steven Taylor

Regional Director

CC OWNER LLC.

400 7th Street, SW

Washington, DC 20024

**Re: Permit Nos. 7051, 7052 and 7053 to Operate Two 32.695 MMBTU/hr and One 14.288 MMBTU/hr Natural Gas and No. 2 Fuel Oil Fired Boilers at 400 7th Street SW**

Dear Mr. Taylor:

Pursuant to §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 may construct or operate a stationary source in the District of Columbia. The application of the CC OWNER LLC (the Permittee) to operate three dual fuel (natural gas and No. 2 fuel oil) Cleaver Brooks boilers, as listed in the table below, at the Constitution Center, located at, 400 7th Street, SW, Washington, DC has been reviewed.

|  |  |  |
| --- | --- | --- |
| **Boiler Identification** | **Heat Input Rating (MMBTU/hr)** | **Permit Number** |
| Boiler 1 | 32.695 | 7051 |
| Boiler 2 | 32.695 | 7052 |
| Boiler 3 | 14.288 | 7053 |

Based on the submitted plans and specifications as detailed in your application, dated June 29, 2015, your application is hereby granted subject to the following conditions:

1. General Requirements:
   1. The approval is issued pursuant to the applicable air pollution control requirements of 20 DCMR for the operation of the steam boilers.

b. This set of permits will expire on April 18, 2021 (20 DCMR 200.4). If continued operation after this date is desired, the owner or operator shall submit an application for renewal by January 18, 2021.

c. Operation of equipment under the authority of this permit shall be considered acceptance of its terms and conditions.

d. 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.

e. This permit shall be kept on the premises and produced upon request.

f. Failure to comply with the provisions of this permit may be grounds for suspension or revocation. [20 DCMR 202.2]

1. Emissions Limitation:

a. The two 32.695 MMBTU/hr boilers (identified as Boiler Nos. 1 and 2) shall not emit pollutants in excess of those specified in the following tables [20 DCMR 201]:

| **Boilers 1 and 2 Emission Limits (Each)** | | |
| --- | --- | --- |
| **Pollutant** | **Short-Term Limit**  **(Natural Gas) (lb/hr)** | **Short-Term Limit**  **(No. 2 Fuel Oil) (lb/hr)** |
| Carbon Monoxide (CO) | 1.2 | 1.3 |
| Oxides of Nitrogen (NOx) | 1.18 | 3.84 |
| Particulate Matter < 10 microns (PM10) | 0.327 | 0.82 |
| Sulfur Dioxide (SO2) | 0.0549 | 16.48 |

* 1. The one 14.288 MMBTU/hr boiler (identified as Boiler No. 3) shall not emit pollutants in excess of those specified in the following table [20 DCMR 201]:

| **Boiler 3 Emission Limits** | | |
| --- | --- | --- |
| **Pollutant** | **Short-Term Limit**  **(Natural Gas) (lb/hr)** | **Short-Term Limit**  **(No. 2 Fuel Oil) (lb/hr)** |
| Carbon Monoxide (CO) | 0.53 | 0.55 |
| Oxides of Nitrogen (NOx) | 0.52 | 1.68 |
| Particulate Matter < 10 microns (PM10) | 0.143 | 0.36 |
| Sulfur Dioxide (SO2) | 0.0240 | 7.21 |

* 1. Visible emissions shall not be emitted from these units except that discharges not exceeding 40% opacity (unaveraged) shall be permitted for two (2) minutes in any sixty (60) minutes period and for an aggregate of twelve (12) minutes in any twenty-four (24) hours period during start-up, cleaning, adjustment of combustion controls, or malfunction of the equipment. (20 DCMR 606.1).
  2. In addition to complying with Condition II(b), the Permittee shall not discharge from the unit any emissions that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. [40 CFR 60.43c(c)]
  3. Particulate matter emission from the boilers shall not be greater than 0.08 pounds per million BTU from Boilers 1 and 2 and 0.09 pounds per million BTU from Boiler 3. [20 DCMR 600.1]

* 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 likely to be injurious to the public health or welfare, or which interferes with the reasonable enjoyment of life and property is prohibited. [20 DCMR 903.1]

III. Operational Limitations:

* 1. Natural gas shall be used as the primary fuel in the boilers covered by these permits document. No. 2 fuel oil shall be used in accordance with ConditionIII(c). No other fuels are approved for use.

b. The back-up fuel for the boilers shall be No. 2 fuel oil that meets the following requirements [20 DCMR 801]:

* + 1. At no time shall the fuel contain greater than 0.2 weight percent sulfur [40 CFR 60.42c(d) and 20 DCMR 201];
    2. On an after July 1, 2016, no fuel oil shall be purchased for use in these boilers that contains in excess of five hundred parts per million (500 ppm) by weight, or five one-hundredths percent (0.05%) by weight;
    3. On and after July 1, 2018, no fuel oil shall be purchased for use in these boilers that contains more than fifteen parts per million (15 ppm) or fifteen ten-thousandths percent (0.0015%) by weight of sulfur, except as specified in Condition III(b)(4);
    4. When EPA temporarily suspends or increases the applicable limit or percentage by weight of sulfur content of fuel required or regulated by EPA by granting a waiver in accordance with Clean Air Act § 211(c)(4)(C) provisions, the federal waiver shall apply to corresponding limits for fuel oil in the District as set forth in Condition III(b)(3);
    5. If a temporary increase in the applicable limit of sulfur content is granted under Condition III(b)(4), the suspension or increase in the applicable limit will be granted for the duration determined by EPA;

c. The boilers shall operate on No. 2 fuel oil only for the following reasons: [20 DCMR 201, 40 CFR 63.11195(e) and 40 CFR 63.11237]

1. During periods of gas supply emergencies;

2. During periods of gas curtailment; or

3. For periodic testing on liquid fuel not to exceed a combined total of 48 hours

during any calendar year.

d. This approval is valid for the specific activity cited in the application submitted to this office. Any deviation from the specific activity or method of operation is a violation of the permit. During any No. 2 fuel oil firing, only one boiler shall be operated to handle heating load, while a second boiler may be maintained at the manufacturer’s minimum temperature in a non-firing condition through a Building Automation System (BAS) “Hot Stand By” flow control sequence as specified in the June 29, 2015 application cover letter.

e. The boilers shall be operated at all times in a manner consistent with the applicable manufacturer’s specifications for the unit.

f. At all times, including periods of startup, shutdown, and malfunction, the owner or operator shall, to the extent practicable, maintain and operate the unit 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]

1. Monitoring and Testing Requirements

a. The Permittee shall monitor the operation of the boilers in a manner consistent with a good preventive maintenance program.

b. The Permittee shall monitor the type and amount of fuel burned in the boilers, along with the reason for and duration of any use of No. 2 fuel oil.

c. The Permittee shall monitor the stack outlets and identify any visible emissions to ensure that if they occur, the problem is identified and repaired.

d. At least once per week, 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 Reference Method 9, 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 week, 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 incidence or shall make arrangements for prompt observation by an individual certified in accordance with EPA Reference Method 9 to determine compliance with Condition II(c).

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

The Air Quality Division (AQD) Compliance and Enforcement Branch shall be notified at least fifteen (15) days in advance of the testing required by this condition so as to be given the opportunity to observe this testing. The notification shall be sent to the following address:

Chief, Compliance and Enforcement Branch

Air Quality Division

Department of Energy and Environment

1200 First Street NE, 5th Floor

Washington DC 20002

f. To show compliance with Condition III(b), the Permittee shall obtain and maintain records in accordance with Condition V(f). Additionally, the Department reserves the right to require supplemental sampling and testing of the fuel oil to confirm the certifications provided by the fuel supplier. If such sampling is required, it shall be performed in accordance with the following methods:

1. To obtain fuel samples:

A. ASTM D 270, “Standard Method of Sampling Petroleum and Petroleum Products;”

B. ASTM D 4057, “Practice for Manual Sampling of Petroleum and Petroleum Products;” or

C. ASTM D 4177, “Standard Practice for Automatic Sampling of Petroleum and Petroleum Products;”

2. To determine the fuel oil grade: ASTM D 396, “Standard Specification for Fuel Oils;”

3. To determine the sulfur concentration of fuels:

A. ASTM D 129, “Standard Test Method for Sulfur in Petroleum Products (General Bomb Method)”;

B. ASTM D 1266, “Standard Test Method for Sulfur in Petroleum Products (Lamp Method)”;

C. ASTM D 1552, “Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method”;

D. ASTM D 2622, “Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry”;

E. ASTM D 4294, “Test Method for Sulfur in Petroleum and Petroleum Products by Energy Dispersive X-ray Fluorescence Spectrometry;” or

F. ASTM D 5453, “Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Spark Ignition Engine Fuel, Diesel Engine Fuel, and Engine Oil by Ultraviolet Fluorescence;” and

4. Other methods developed or approved by the Department or EPA.

g. At least once during the term of this permit, the Permittee shall conduct performance tests on the three boilers to determine compliance with Conditions II(a), (b) and (e) (except SO2), for both allowable fuels, and shall furnish the District with a written report of the results of such performance tests in accordance with the following requirements [20 DCMR 502]:

1. One (1) original and one (1) copy of the 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

Air Quality Division

1200 First Street NE, 5th Floor

Washington, DC 20002

2. The test protocol shall be approved by the District prior to initiating any testing. Upon approval of the test protocol, the Company shall finalize the test date with the assigned inspector in the Compliance and Enforcement Branch. The District 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 District within sixty (60) days of the test completion. One (1) original and one (1) copy of the test report shall be submitted to the address in Condition IV(g)(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 each permit condition.

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

5. The results must demonstrate to the District’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 owner or operator shall propose corrective action(s). Failure to demonstrate compliance through the test may result in enforcement action.

h. 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]

1. Recordkeeping

The following information shall be recorded and maintained in a log at the facility for

a period not less than three (3) years from the date the information is obtained. [20 DCMR 500.8]

* 1. The Permittee shall keep records of fuel use for each boiler, showing therms or standard cubic feet of natural gas combusted each month as well as gallons of No. 2 fuel oil combusted each month. These records shall be kept as a 12-month rolling sum.
  2. The Permittee shall keep records of all instances of boiler operation of each boiler using No. 2 fuel oil, including the reason for operation using that fuel and the number of hours the boiler is operated using that fuel. These data shall be maintained in a rolling twelve month sum format [20 DCMR 500.2 and 20 DCMR 500.8];
  3. The Permittee shall keep records of all maintenance performed on the emission unit so as to document compliance with Conditions III(d) and (e). These records shall be initialed to attest to their accuracy.
  4. The Permittee shall keep records of the results of all visible emissions monitoring performed pursuant to Condition IV(d) including notes indicating when no observations were performed as a result of no operations of a given boiler that week. 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.
  5. The Permittee shall keep records of the results of all Method 9 visible emissions testing performed pursuant to Conditions IV(d) and (e). 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 Conditions II(c) and (d).

f. For each delivery of No. 2 fuel oil, the Permittee shall obtain from the fuel supplier an electronic or paper record of the following fuel data (*Note that a product transfer document that meets federal requirements and contains this these data, such as a Bill of Lading, may be used to meet these requirements and shall be considered a certification that the information is accurate.*):

1. The date of delivery;

2. The name, address, and telephone number of the transferor (the fuel supplier);

3. The name and address of the transferee (the Permittee or Permittee’s representative);

4. The volume of fuel oil being sold or transferred;

5. The fuel oil grade; and

6. The sulfur content of the fuel oil as determined using the sampling and testing methods specified in Condition IV(f), which may be expressed as the maximum allowable sulfur content.

g. The Permittee shall keep records of the results of all testing performed pursuant to Condition IV(g) and (h).

VI. Reporting

a. The Permittee shall immediately contact AQD’s Compliance and Enforcement Branch upon becoming aware of a sudden equipment failure or emergency or emissions in excess of any emission limit.

b. The Permittee shall report the fuel usage and the criteria pollutants emissions from the boilers to AQD upon request.

c. In addition to complying with Condition VI(a) and any other reporting requirements mandated by the District of Columbia, the owner or operator shall, within thirty (30) calendar days of becoming aware of any occurrence of excess emissions, supply the Department in writing with the following information:

* + 1. The name and location of the facility;
    2. The subject source(s) that failed, experienced the emergency, or caused the excess emissions;
    3. The time and date of the first observation of the equipment failure, emergency, or excess emissions;
    4. The cause and estimate/expected duration of the excess emissions (if applicable); and
    5. The proposed corrective actions and schedule to correct the conditions causing the emergency or excess emissions.

d. The Permittee shall submit the results of all testing required by Conditions IV(g) and (h) as specified in Condition IV(g), except that the Department may require different submittal protocols to be followed in cases of testing required pursuant to Condition IV(h).

If you have any questions, please call me at (202) 535-1747 or Abraham T. Hagos at (202) 535-1354.

Sincerely,

Stephen S. Ours, P.E.

Chief, Permitting Branch

SSO:ATH