February 28, 2017

Richard Farr

Chief, Facilities Management and Services Division

United States Department of the Interior

1849 C Street NW

Washington, DC 20240

**RE: Permit Nos. 7094 and 7095 to Construct and Operate Two Natural Gas-Fired MicroTurbines at 1849 C Street NW**

Dear Mr. Farr:

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 the United States Department of the Interior (the Permittee) to construct and operate the following one 200 kWe and one 800 kWe natural gas fired MicroTurbine at 1849 C Street NW, Washington DC 20240, have been reviewed:

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| --- | --- | --- | --- |
| **Permit No.** | **Equipment Size (kWe)**  | **Manufacturer/Model** | **ID Number** |
| 7094  | 200 | Capstone Turbine Corporation/C200 | MicroTurbine #1 |
| 7095 | 800 | Capstone Turbine Corporation/C800 | MicroTurbine #2 |

Based on the submitted plans and specifications as detailed in the applications received on February 17, 2016, the construction and operation of the MicroTurbines is permitted, subject to the following conditions:

I. General Requirements:

a. The MicroTurbines shall be constructed, maintained, and operated in accordance with the air pollution control requirements of 20 DCMR.

b. This set of permits will expire on February 27, 2022. [20 DCMR 200.4] If continued operation after this date is desired, the Permittee shall submit application for renewal by November 17, 2021.

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 units are 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:

a. Each of the MicroTurbines shall not emit pollutants in excess of the following [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.*

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| --- |
| **MicroTurbine Emission Limits (lb/hr)** |
| **Pollutant** | **Model C200** | **Model C800** |
| Carbon Monoxide (CO) | 0.22  | 0.88 |
| Oxides of Nitrogen (NOx) | 0.08  | 0.32 |
| Total Particulate Matter (PM Total)\* | 0.02  | 0.06 |
| Sulfur Dioxide (SO2) | 0.01  | 0.06 |

\*PM Total includes both filterable and condensable fractions.

* 1. b. Visible emissions shall not be emitted into the outdoor atmosphere from the MicroTurbines, 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]

c. 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:

 a. The sole allowable fuel for each of the two MicroTurbines is natural gas. [20 DCMR201]

 b. The Permittee shall install and maintain a totalizing natural gas fuel meter on each of the MicroTurbines to track natural gas usage.

 c. All electricity produced by the MicroTurbine generators shall be used by the Permittee and shall not be sold.

d. The MicroTurbines shall be operated and maintained in accordance with the recommendations of the equipment manufacturer.

e. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the units 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.

IV. Monitoring and Testing:

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 pursuant to Condition IV(a) of this permit, the Permittee shall conduct performance testing on one or both of the MicroTurbines (as requested) to determine compliance with Conditions II(a) (except SO2) (or any subset of these requirements requested 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

Air Quality Division

1200 First Street NE

5th Floor

Washington, DC 20002

2. The test protocol shall be approved by the Department 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 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 conditions.

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 calendar year, during operation of each MicroTurbine, the Permittee shall conduct visual observations of the emissions from each MicroTurbine. 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 MicroTurbine 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 MicroTurbine during the term of this permit. Such a test program shall consist of a minimum of 30 minutes of opacity observations of each MicroTurbine and shall be performed by a person certified in accordance with EPA Reference Method 9 (40 CFR 60, Appendix A).

V. Record Keeping Requirements: [20 DCMR 200.7]

a. The following information shall be recorded and maintained at the facility, in a manner such that it is readily available for inspection by the Department, for a period not less than three (3) years from the date of each record. [20 DCMR 500.8]

1. The Permittee shall maintain records of all visible emissions monitoring performed pursuant to Condition IV(c). These records shall include the identity of the person performing the monitoring as well as their initials or signature indicating his/her certification of the accuracy of the observations.

2. The Permittee shall maintain records of all 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 indicating whether the results show compliance with Condition II(b).

3. The Permittee shall maintain records of the amount of fuel used each month in each of the MicroTurbines. These data shall be maintained for a period of not less than three (3) years in a rolling 12-month sum format.

4. The Permittee shall maintain records of the maintenance performed on each unit.

5. The Permittee shall maintain records of the occurrence and duration of each malfunction of operation.

6. The Permittee shall maintain records of the actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process, air pollution control, and monitoring equipment to its normal or usual manner of operation.

b. The following information shall be maintained at the facility for the duration of the existence of the MicroTurbines at the facility:

1. Records of the results of all emissions testing required for the two MicroTurbines pursuant to Conditions IV(a) and (b) of this permit; and

2. A copy of each MicroTurbine’s manufacturer’s maintenance and operating recommendations.

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

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