March 17, 2020

Christopher Potter

Director, Utilities and Power Plant Operations

Architect of the Capitol, U.S. Capitol Power Plant

25 E Street SE

Washington DC 20003

**RE: Permit No. 6232-R2 to Operate a 300 hp Diesel-Fired Emergency Fire Pump at the U.S. Capitol Power Plant (CPP) Facility**

Dear Mr. Potter:

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 the Architect of the Capitol, U.S. Capitol Power Plant (the Permittee) to operate one 300 hp (223.8 kWm) Clarke Fire Protection Products Model JW6H-UF58 emergency fire pump with John Deere Model 6081HF001, serial number RG6081H-175707 diesel fired fire pump engine at the Capitol Power Plant (CPP) facility, located at 25 E Street SE, per the submitted plans and specifications, received on August 27, 2019, is hereby approved, subject to the following conditions:

I. General Requirements:

a. The emergency fire pump shall be operated in accordance with the air pollution control requirements of 20 DCMR.

b. This permit expires on March 16, 2025 (20 DCMR 200.4). If continued operation after this date is desired, the owner or operator shall submit a renewal application by December 16, 2024.

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]

g. If not already completed by the time of issuance of this permit, the applicant shall, within one year of issuance of this permit, submit a revision to the facility’s pending Chapter 3 (Title V) permit application to include the requirements of this permit in the renewed Title V permit to be subsequently issued.

h. This permit supersedes permit #6232-R1, issued December 3, 2014.

II. Emission Limitations:

a. Visible emissions shall not be emitted into the outdoor atmosphere from this fire pump, 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(a) as stated above.*

b. 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 emergency fire pump shall be operated for fewer than 500 hours in any 12-consecutive-month period. If operation of 500 hours or more is desired, the Permittee shall submit an application to amend this permit to comply with the conditions of 20 DCMR 805 and shall obtain the Department’s approval of such application prior to initiating such operation. [20 DCMR 201]

b. With the exceptions specified in Condition III(c), the emergency fire pump shall be operated only during fire emergencies. [20 DCMR 201]

c. The emergency fire pump may be operated for the purpose of maintenance checks and readiness testing for a period not to exceed one hundred (100) hours per calendar year. Any such operation shall be considered as part of the 500 hours allowed under Condition III(a) above. [20 DCMR 201]

 d. The Permittee shall purchase only diesel fuel that contains a maximum sulfur content of 15 ppm (0.0015 percent by weight) for use in the engine. [20 DCMR 201 and 20 DCMR 801.1] *Note that this is a streamlined permit requirement. The standard requested in the permit application and being established under the authority of 20 DCMR 201 is more stringent than the requirement in 20 DCMR 801.1, thus compliance with this more stringent standard will ensure compliance with both standards.*

e. The emergency fire pump shall be operated and maintained in accordance with the manufacturer’s emission-related written instructions or the Permittee shall develop and implement a written maintenance plan consistent with industry standards for similar models if manufacturer instructions are unavailable. Any Permittee-developed maintenance plan must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [20 DCMR 201]

f. 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. [20 DCMR 201]

IV. Monitoring and Testing Requirements:

a. The Permittee shall monitor the date, time, duration, and reason for each emergency fire pump startup to ensure compliance with Conditions III(a), (b), and (c).

b. In order to ensure compliance with Condition III(a), the Permittee shall monitor the total hours of operation of each generator each month with the use of a properly functioning, non-resettable hour metering device or by tracking the sum of the duration of each instance of operation each month.

c. The Permittee shall test fuel oil as necessary to show compliance with Conditions III(d) and V(c) in accordance with ASTM method D-4294 or D-5453 or other method approved in advance by the Department. [20 DCMR 502.3 and 502.6]

d. 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]

V. Record Keeping Requirements:

a. The following information shall be recorded, initialed (except records generatred automatically by an electronic system), and maintained in a log at the facility (or readily accessible electronically from the facility) for a period not less than five (5) years from the date each piece of information is collected [20 DCMR 500.8 and 20 DCMR 302.1(c)(2)(B)]:

1. The date, time, duration, and reason for each start-up of the emergency fire pump;

2. The total hours of operation for each month and the cumulative 12-month rolling period shall be calculated and recorded within 15 days of the end of each calendar month for the previous month and the 12-month period ending at the end of that month;

3. The total hours of operation for maintenance checks and readiness testing pursuant to Condition III(c) each month, recorded within 15 days of the end of each calendar month, and totaled for each calendar year by January 15 of each year for the previous calendar year;

4. Records of the maintenance performed on the unit *[Note that these records must be sufficient to demonstrate that the Permittee is complying with Condition III(e)]* ;

5. Records of the results of any visible emissions monitoring performed;

6. Records of the occurrence and duration of each malfunction of operation;

7. Records of the actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunction process and air pollution control and monitoring equipment to its normal or usual manner of operation; and

8. Fuel usage records for the unit on a monthly and annual total basis for use in reporting fuel use and emissions from the facility, including equipment covered by this permit, pursuant to the requirements of the Title V permit.

b. The Permittee shall maintain a copy of the emergency fire pump’s manufacturer’s maintenance and operating recommendations at the facility. If such documentation is unavailable, the Permittee shall maintain documentation of the written maintenance plan consistent with industry standards in accordance with which the unit is being maintained. [20 DCMR 500.2]

c. For each delivery of diesel fuel, the Permittee shall maintain one of the following:

1. A fuel delivery receipt containing the date, fuel type, and amount of the delivery and certification from the fuel supplier that the fuel delivered was tested in accordance with an appropriate ASTM method (specified in the certification) and met the requirements of Condition III(d); or

2. A fuel delivery receipt and documentation of sampling and analysis containing the following information:

i. 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);

ii. 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;

iii. The date and time the sample was taken,

iv. The name, address, and telephone number of the laboratory that analyzed the sample, and

v. The test method used to determine the sulfur content.

VI. Reporting Requirements:

The Permittee shall include the equipment covered by this permit in all reports required by the Title V permit for the facility, including, but not limited to, semi-annual and annual compliance certifications and reports.

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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