

**GOVERNMENT OF THE DISTRICT OF COLUMBIA**

**District Department of the Environment**



January 8, 2013

Smithsonian Institution  
Board of Regents c/o Office of the Secretary  
Attn: Kendra Gastright  
Associate Director; SED  
10<sup>th</sup> & Constitution Avenue, NW, MRC 132  
Washington, DC 20560

**RE: Permit (#6657) To Operate an Emergency Generator at the Smithsonian Institution's Hirschhorn Museum**

Dear Ms. Gastright:

Pursuant to sections 200.1 and 200.2 of Title 20 of the District of Columbia Municipal Regulations (20 DCMR), a permit from the Mayor shall be obtained before any person can construct and operate a new stationary source in the District of Columbia. Your application to operate one (1) 300 kW emergency generator at the Smithsonian Institution's Hirschhorn Museum, located at Independence Avenue at 7<sup>th</sup> Street SW, Washington DC, per the submitted plans and specifications, received September 19, 2012 is hereby approved, subject to the following conditions:

I. General Requirements:

- a. The emergency generator shall be operated in accordance with the air pollution control requirements of 20 DCMR.
- b. This permit expires on January 7, 2018 [20 DCMR 200.4]. If continued operation after this date is desired, the owner or operator shall submit an application for renewal by October 7, 2017.
- 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;



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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]

II. Emission Limitations:

- a. Emissions from this unit shall not exceed those in the following table [40 CFR 60.4205(b), 40 CFR 60.4202(b)(2) and 40 CFR 89.112(a)]:

<b>Pollutant Emission Limits (g/kW-hr)</b>		
NMHC+NO <sub>x</sub>	CO	PM
4.0	3.5	0.20

- b. Visible emissions shall not be emitted into the outdoor atmosphere from this generator, 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 emergency generator shall not be operated in excess of 500 hours in any given 12 month period. If operation beyond 500 hours is desired, the owner or operator 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.

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- b. With the exceptions specified in Condition III(c), the emergency generator shall be operated only during emergencies as follows:
  1. An electrical power outage due to: a failure of the electrical grid; on-site disaster; local equipment failure; or public service emergencies such as flood, fire, natural disaster, or severe weather conditions (e.g. hurricane, tornado, blizzard, etc.);
  2. When there is a substantial deviation of voltage or frequency from the electrical provider to the premises such that the equipment being supported cannot be safely or effectively operated; or
  3. When a sudden, unexpected event occurs that, if not immediately attended to, presents a safety or public health hazard, is necessary to protect equipment from damage, or is necessary to avoid imposing an unreasonable financial burden. An emergency includes operations necessitated by non-routine failures of equipment, but it does not include voluntary demand reductions covered by Condition III (f).
- c. The emergency generator may be operated for the purpose of maintenance checks and readiness testing for a period not to exceed one hundred (100) hours per year. Any such operation shall be considered as part of the 500 hours allowed under Condition III (a) above. [40 CFR 60.4211(f)]
- d. The emergency generator shall fire only natural gas or diesel fuel which contains a maximum sulfur content of 15 ppm (0.0015% by weight) and either a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent. [40 CFR 60.4207(b)]
- e. The emergency generator shall be operated and maintained in accordance with the recommendations of the equipment manufacturer.
- f. The emergency generator shall not be operated in conjunction with a voluntary demand-reduction program or any other interruptible power supply arrangement with a utility, other market participant, or system operator.
- g. At all times, including periods of startup, shutdown, and malfunction, the owner 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.

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IV. Monitoring and Testing Requirements:

- a. The owner or operator shall monitor the date, time, duration, and reason for each emergency generator startup.
- b. In order to ensure compliance with Condition III (a), the owner or operator shall monitor the total hours of operation each month with the use of properly functioning, non-resettable hour metering device.
- c. The owner or operator shall test fuel oil as necessary to show compliance with Conditions III (d) and V(c) in accordance with ASTM method D-4294 or other method approved in advance by the Department. [20 DCMR 502.6 and 502.3]
- d. The owner or operator 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, and maintained in a log at the facility for a period not less than three (3) years [20 DCMR 500.8]:
  1. The date, time, duration, and reason for each start-up of the emergency generator;
  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;
  3. Records of the maintenance performed on the unit;
  4. Records of the results of any visible emissions monitoring performed;
  5. Records of the occurrence and duration of each malfunction of operation; and
  6. 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.
- b. The owner or operator shall maintain a copy of the emergency generator's manufacturer's maintenance and operating recommendations at the facility.
- c. For each delivery of diesel fuel, the owner or operator shall maintain one of the following:

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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:
    - A. The fuel oil type;
    - B. The concentration or weight percent of sulfur in the fuel;
    - C. The date and time the sample was taken;
    - D. The name, address, and telephone number of the laboratory that analyzed the sample; and
    - E. The test method used to determine the sulfur content.
- d. The owner or operator shall maintain a copy of the EPA Certificate of Conformity at the facility at all times.

If you have any questions, please call me at (202) 535-1747 or Olivia Achuko at (202) 535-2997.

Sincerely,

Stephen S. Ours, P.E.  
Chief, Permitting Branch

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