July 9, 2019

Mr. Keith Hull, Director

Research and Development Services Division

Naval Research Laboratory

4555 Overlook Ave., SW

Washington, DC 20375-5320

**RE: Permit No. 7257 to Construct and Operate a Dust Collector at Naval Research Laboratory, Building 57, 4555 Overlook Avenue SW, Washington, DC**

Dear Mr. Hull:

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 or operate a stationary source in the District of Columbia. The application of U.S. Naval Research Laboratory (“the Permittee”) to construct and operate a Downflo Evolution dust collector, B57-DstCol-3, located in the west side of Building 57, U.S. Naval Research Laboratory, Washington, DC, has been reviewed:

Based on the submitted plans and specifications as detailed in the application dated April 1, 2019 and received April 2, 2019, your application to construct and operate is hereby approved subject to the following conditions:

I. General Requirements:

a. The dust collector shall be constructed and operated in accordance with the air pollution control requirements of 20 DCMR.

b. This permit will expire on July 8, 2024 [20 DCMR 200.4]. If continued operation after this date is desired, the Permittee shall submit an application for renewal by April 8, 2024.

c. Operation of equipment under the authority of this set of permit 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 set of permits 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]
3. Within twelve months of issuance of this permit, the Permittee shall apply to have the equipment covered therein incorporated into the U.S. Naval Research Laboratory’s Title V operating permit. This application is due by July 8, 2020.

II. Emission Limitations:

a. Total suspended particulate matter (TSP) emissions from the dust collector shall not exceed 0.03 gr/dscf or 1.62 lb/hr. [20 DCMR 603]

b. Adding diluent air to the gas stream to comply with Condition II(a) is prohibited. [20 DCMR 603.3]

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]

d. Visible emissions shall not be emitted into the outdoor atmosphere from this equipment. [20 DCMR 201 and 20 DCMR 606.1].

III. Operational Limitations:

1. The dust collector shall be operated for no more than 5,824 hours in any 12-consecutive-month period. [20 DCMR 201]
2. The Permittee shall properly operate and maintain the dust collection system, including collection trunks and blowers so as to minimize emissions from woodworking operations. [20 DCMR 201]
3. The dust collector shall be operated and maintained in accordance with the manufacturer’s operational and maintenance procedures in order to minimize emissions from woodworking operations. [20 DCMR 201]
4. The Permittee shall establish a minimum differential pressure across the cartridge filters at the time of initial start-up with a full set of new cartridge filters. Whenever the differential pressure drops below this minimum level, the equipment shall be shut down and inspected and any worn or damaged filters shall be replaced. If a full set of new filters is not installed, the previous minimum differential pressure level shall be maintained. [20 DCMR 201]
5. The Permittee shall maintain sufficient stores of cartridge filters in a readily available location to allow for prompt replacement of any worn or damaged filters. [20 DCMR 201]

IV. Monitoring and Testing Requirements:

a. The Permittee shall monitor the physical condition of the dust collector and repair or replace any damaged components. [20 DCMR 201.1]

b. The Permittee shall periodically check the compressed air components and replace compressed air filters and other components as necessary for proper operation. [20 DCMR 201]

1. The Permittee shall use a properly installed and maintained differential pressure monitoring device to monitor the pressure drop across the cartridge filters to assure normal operating conditions. The pressure drop shall be monitored at least once per day during operations to ensure that the differential pressure remains above the minimum pressure drop established pursuant to Condition III(d) and otherwise within proper operating parameters. In lieu of manual monitoring, an electronic monitoring system may be used if appropriate alarms are installed to ensure that operations are maintained within the proper operating range and that the system records a log of readings consistent with the record keeping requirements of this permit. [20 DCMR 201]
2. The Permittee shall monitor exhaust from the dust collector to ensure compliance with Condition II(d).
3. The Permittee shall visually inspect and empty the dust collector quarterly or at a frequency that ensures proper operation of the dust collector. [20 DCMR 201]
4. The Permittee shall monitor dust disposal to minimize fugitive emissions [20 DCMR 201]
5. The Permittee shall inspect the filter media as needed and at least on an annual basis and shall replace the filters as needed to ensure continual proper operation of the dust collector. [20 DCMR 201]
6. 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: [20 DCMR 200.7]

1. The following information shall be recorded, initialed, and maintained in a log at the facility for a period not less than five (5) years from the date the information is obtained [20 DCMR 302.1(c)(2)(B) and 20 DCMR 500.8]:
2. The documentation of the results of all inspections pursuant to Conditions IV(b), (e), and (g);

2. The total hours of operation each month, maintained in a 12-month rolling sum format to document compliance with Condition III(a).

3. Records of the Date, description, and who performed the any maintenance on the equipment *[Note that these records must be sufficient to document that the Permittee is complying with the requirements of Condition III(b) and (c)]*;

4. Records of the results of differential pressure monitoring performed upon start-up of the equipment each time a full set of cartridge filters are installed. These data shall be subsequently used as the minimum differential pressure allowable in across the filters, pursuant to Condition IV(c);

5. Records of all differential pressure monitoring performed pursuant to Condition IV(c);

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

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

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

1. The Permittee shall maintain a copy of the dust collector manufacturer’s maintenance and operating recommendations at the facility for the life of the unit. [20 DCMR 500.1]
2. The Permittee shall maintain a copy of the results of any tests performed pursuant Condition IV(h) at the facility for the life of the unit.

If you have any questions, please call me at (202) 535-1747 or John Nwoke at (202) 724-7778.

Sincerely,

Stephen S. Ours, P.E.

Chief, Permitting Branch

SSO:JCN