July 7, 2020

Carl D. Jones

Chairman of the Board

Monumental Concrete LLC

3 DC Village Lane SW

Washington, DC 20032

**RE: Permit No. 6550-R2 to Operate a Ready Mix Concrete Batch Plant at 3 DC Village Lane SW, Washington, DC**

Dear Mr. Jones:

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 Monumental Concrete, LLC (“the Permittee”) for a permit to operate the ready mix concrete batch plant with associated 2.7 MMBTU/hr No. 2 fuel oil fired hot water heater located at 3 DC Village Lane SW, Washington, DC has been reviewed. Permission to operate the ready mix concrete batch plant with associated 2.7 MMBTU/hr No. 2 fuel oil fired hot water heater per the submitted application dated January 14, 2020, is granted subject to the following conditions:

I. General Requirements:

* 1. The approved ready mix concrete batch plant and associated hot water heater shall be operated in accordance with all applicable air pollution control requirements of 20 DCMR.
  2. This permit expires on July 6, 2025 [20 DCMR 200.4]. If continued operation after this date is desired, the owner or operator shall submit an application for renewal by April 6, 2025.

c. Operation of equipment under the authority of this permit 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 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.

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]

II. Emission Limitations:

1. Emissions of dust shall be minimized in accordance with the requirements of 20 DCMR 605 and the “Operational Limitations” of this permit.
2. The emission of fugitive dust from any material handling, screening, crushing, grinding, conveying, mixing, or other industrial-type operation or process is prohibited. [20 DCMR 605.2]
3. The discharge of total suspended particulate matter into the atmosphere from any process shall not exceed three hundredths (0.03) grains per dry standard cubic foot of the exhaust. [20 DCMR 603.1]
4. The discharge of total suspended particulate matter from the ready mix concrete batch plant shall not exceed 40 pounds per hour. [20 DCMR 603.1 and Appendix 6-1]
5. Total suspended particulate matter emissions from the boiler shall not exceed 0.13 pounds per million BTU of heat input. [20 DCMR 600.1]
6. Visible emissions shall not be emitted from the equipment covered by this permit 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(e) as stated above.*

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 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 maximum allowable material, excluding water, loaded into the central mixer shall be 134,750 tons in any 12-consecutive-month rolling period. [20 DCMR 201]

*Note that this is a District-enforceable only condition.*

b. Dust shall be controlled as follows [20 DCMR 201]

1. All dust generated from mixer or truck loading shall be captured and vented through the baghouse; and

2. All dust generated from pneumatic conveying to elevated storage silos shall be captured and vented through one of the two (2) fabric filter dust collectors.

c. Each of the two (2) fabric filter dust collectors and baghouse shall maintain a particulate matter control efficiency of 99.9% at all times when the ready mix concrete batch plant is operating. [20 DCMR 201]

d. The proper operation of the primary fabric filter (baghouse) shall be demonstrated with the use of differential pressure monitoring using an installed differential pressure gauge as follows:

1. When new bags are installed, the differential pressure across them shall be recorded. At no time during the life of those bags shall the differential pressure per permitted to drop below that level. Should this occur, the equipment shall be shut down and the bags inspected and replaced as needed.

2. After an initial reasonable period of operation to build up dust cake on the bags, the differential pressure shall be maintained between 4 and 6 inches of water. If, after 4 inches of water has been attained for an extended period (approximately equal to a full operating day), if the differential pressure again drops below 4 inches of water during operation, the equipment shall be shut down and the bags inspected and replaced as needed.

3. Operation with differential pressures equal to and above 6 inches of water are not permitted. If they are observed, the equipment shall be shut down and the bags inspected and replaced as needed.

e. A set of replacement filters for each of the two fabric filter dust collectors and the baghouse shall be kept onsite at all times (except for a reasonable period immediately after replacement of the filters to provide time for prompt re-order and shipment of a new set of replacement filters). Additionally a set of key replacement parts for the dust collectors and the baghouse shall be kept on site at all times as specified by the equipment manufacturers’ recommendations. [20 DCMR 201]

f. The Permittee shall take reasonable precautions to minimize the emission of any fugitive dust into the outdoor atmosphere. These reasonable precautions shall include, but not be limited to the following [20 DCMR 605.1]:

* + - 1. In the case of unpaved roads, unpaved roadways, and unpaved parking lots:

Use of clean water in sufficient quantities and at sufficient frequencies to prevent the visible emission of dust due to the movement of vehicles or of the wind (use of binders or other chemicals may only be used with prior approval of the Department); and

Prompt clean-up of any dirt, earth, or other material from the vicinity of the road, roadway, or lot which has been transported from the road, roadway, or lot due to anthropogenic activity or due to natural forces.

* + - 1. In the case of paved roads, paved roadways, and paved parking lots: Maintenance of the road, roadway, lot, or paved shoulder in a reasonably clean condition through reasonably frequent use of water, sweepers, brooms, or other means through reasonably frequent removal of accumulated dirt from curb-side gutters, through reasonably prompt repair of pavement, or through any other means;
      2. In the case of vehicles transporting dusty material or material which is likely to become dusty:
         1. Fully covering the material in question, with a tarpaulin or other material; and
         2. Operation, maintenance, and loading of the vehicle, distribution of the loaded material on or in the vehicle, and limiting the quantity of material loaded on or in the vehicle, so that there will be no spillage of the material onto the roads;
      3. In the case of vehicles which accumulate dirt on the wheels, undercarriages, and other parts of the vehicle, due to the movement of the vehicle on dusty, dirty or muddy surfaces: Water washing of all of the dirty parts of the vehicle to thoroughly remove the dirt before or immediately after the vehicle leaves the dusty, dirty, or muddy surface.
      4. In the case of the demolition of buildings or structures: Use, to the extent possible, of water;
      5. In the case of removal of demolition debris which is dusty or likely to become dusty: Use of water to thoroughly wet the material before moving or removing the material and keeping it wet or otherwise in a dust-free condition until eventual disposal;
      6. In the case of loading and unloading of dusty material and in the case where dry sand-blasting or dry abrasive cleaning is necessary: Use of enclosed areas or hoods, vents, and fabric filters. If it is shown to the satisfaction of the Mayor that use of enclosed areas, hoods, vents, and fabric filters is not possible, alternate control techniques acceptable to the Mayor and designed to minimize the emissions to the extent possible shall be utilized; and
      7. In the case of stockpiles of dusty material: Use, where possible, of closed silos, closed bins or other enclosures which are adequately vented to fabric filters. Where the use of closed silos, closed bins, or other enclosures is not possible, thorough wetting of the material before loading onto the stockpile and keeping the stockpile wetted, covered, or otherwise in a non-dusty condition.
      8. The facility shall be maintained in a tidy manner, ensuring that spilled materials are cleaned up at least daily by close of business and additionally as necessary to avoid migration of dust offsite. Cleaning shall include materials dropped from trucks, materials spilled from conveyors, and any other spillages or accumulations.

g. The ready mix concrete batch plant and associated hot water heater shall be operated and maintained in accordance with the recommendations of the equipment manufacturers. [20 DCMR 201]

h. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the ready mix concrete batch plant and associated hot water heater 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 606.3]

1. The water heater (hot water tank) associated with the operation shall burn only distillate fuel oil (No. 2 fuel oil or diesel fuel) with a sulfur content not exceeding 15 ppm (0.0015% sulfur by weight). [20 DCMR 201 and 20 DCMR 801.3]
2. The Permittee shall perform tune-ups on the boiler at least once every five years. The tune-ups shall be conducted no more than 61 months after the previous tune-up. The tune-ups shall include, at a minimum, the following: [40 CFR 63.11214 and 63.11223]:
   1. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled boiler shutdown, but you must inspect each burner at least once every 72 months).
   2. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
   3. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown, but you must inspect the system controlling the air-to-fuel ratio at least once every 72 months).
   4. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOx requirement to which the unit is subject.
   5. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be made using a portable CO analyzer that has been calibrated and is operated according to manufacturer specifications.
   6. If the boiler is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.

IV. Monitoring and Testing Requirements:

1. The Permittee shall monitor the quantity of material, excluding water, loaded into the central mixer each day to ensure compliance with Condition III(a).
2. The Permittee shall monitor the differential pressure across the baghouse filters to ensure compliance with Condition III(d).
3. At least once per week, during operation of the ready mix concrete batch plant, the Permittee shall conduct visual observations of the emissions from the plant, both from the outlet stack and from elsewhere in the plant. If no operations are occurring during a given week, this shall be so noted. If visible emissions are observed, the following procedures shall be followed to address Conditions II(b) and (f), respectively:

1. If visible emissions of fugitive dust are observed in excess of the limit specified in Condition II(b), prompt action shall be taken to correct the problem. Operations shall not continue (except as necessary for troubleshooting purposes) if such exceedances are observable, until such time as the problem has been addressed and the equipment has been returned to compliance.

1. If visible emissions of fugitive dust or smoke are observed, the Permittee shall either discontinue operations until the problem is corrected or 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 and shall be performed while operating in a similar manner as was occurring when the visible emissions were observed. If an exceedance of the requirements of Condition II(f) are observed, operations shall be discontinued until the problem is corrected.
2. The Permittee shall ensure that persons actually participating in the maintenance and operation of sources and equipment are adequately trained and supervised so as to minimize the production of emissions during operation. [20 DCMR 606.6]
3. Permittee shall monitor any odor emitted from the facility and take any actions necessary to ensure compliance with Condition II(g).
4. The Permittee shall monitor the conditions at the site and take any actions necessary to ensure compliance with the fugitive dust requirements of Condition III(f).
5. The Department reserves the right to require that the Permittee conduct performance tests and/or stack tests to determine compliance with Conditions II(c), (d), and (e). In the case that a performance test or stack test is required by the District, the Permittee shall furnish the District with a written report of the results of such performance tests in accordance with the following procedures. [20 DCMR 502.1]
6. The stack tests shall be performed in accordance with 40 CFR 60, Appendix A, Methods 1 through 5 and Method 201/201a or other method(s) approved by the Department. The performance test shall consist of three separate one-hour runs using this test method.
7. One (1) original test protocol shall be submitted 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.
8. The test protocol and test date(s) shall be approved by the Department prior to initiating any testing. The Department must have the opportunity to observe the test for the results to be considered for acceptance.
9. The final results of the testing shall be submitted to the Department within sixty (60) days of the test completion. One (1) original test report shall be submitted to the address in Condition IV(g)(7).
10. 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:

i. A statement that the owner or operator has reviewed the report from the emissions testing firm and agrees with the findings.

ii. Permit number(s) and condition(s) which are the basis for the compliance evaluation.

iii. Summary of results with respect to each permit condition.

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

1. 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 owner or operator shall propose corrective action(s). Failure to demonstrate compliance through the test may result in enforcement action.
2. The following address shall be used for correspondence with the Department for this performance testing:

Chief, Compliance and Enforcement Branch

Air Quality Division

1200 First Street NE

5th Floor

Washington DC 20002

1. In addition to the testing required above, 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]
2. The Permittee shall test fuel oil as necessary to show compliance with Condition III(i) in accordance with appropriate ASTM methods. [20 DCMR 502.6 and 502.3]
3. The Permittee shall monitor the operation of the equipment, the maintenance performed on it, and the stores of extra filters to ensure compliance with Conditions III(b), (c), (e), (g), and (h).
4. The Permittee shall monitor the activities at the site and the actions taken to minimize dust emissions to ensure compliance with Conditions II(a) and III(f).

V. Record Keeping and Reporting Requirements:

The following information shall be recorded, and maintained in a log at the facility and made available when requested for a period of not less than five years from the date of each record (except where a longer period is specified herein). [20 DCMR 500.8] *Note that this condition is streamlined with the requirements of 40 CFR 63.11225(d).*

The Permittee shall record the differential pressure across the baghouse by use of the differential pressure gauge at least once each day, during truck or mixer loading to ensure compliance with the operational requirements of Condition III(d) of this permit.

The Permittee shall keep a record of the following production information:

* + - 1. The tons of material, excluding water, loaded into the central mixer each day;
      2. The sum of the tons of material, excluding water, loaded into the central mixer each month, updated no later than the fifth day of each calendar month for the previous calendar month;
      3. The sum of the previous 12 months of material, excluding water, loaded into the central mixer, in tons, updated by the fifth day of each calendar month for the 12-month period ending at the end of the previous calendar month to document compliance with Condition III(a).

The Permittee shall keep a record of the date of bag change-out and the differential pressure reading immediately after replacing bags in the baghouse pursuant to Condition III(d)(1).

The Permittee shall keep a record of all deviations from the pressure drop requirements of Condition III(d) and the actions taken to correct each identified deviation.

The Permittee shall maintain a record of all maintenance performed on the equipment covered by this permit to document compliance with Condition III(g).

The Permittee shall maintain a copy of the ready mix concrete batch plant, fabric filter dust collectors, and baghouse manufacturers’ maintenance and operating recommendations and make such available to Department inspectors.

The Permittee shall maintain a copy of the specifications for the bags used in the fabric filter dust collectors and baghouse to document compliance with Condition III(c).

The Permittee shall keep a record of the results of all visible emissions monitoring performed pursuant to Condition IV(c).

The Permittee shall keep records of all odors identified pursuant to Conditions II(g) and IV(e) and the actions taken to correct them.

The Permittee shall keep records of any fugitive dust exceedances identified pursuant to Conditions IV(c) or (f) and the actions taken to correct them.

The Permittee shall keep records of the operating conditions, raw data, and results of any testing performed pursuant to Conditions IV(g) and (h) for the duration of the operations of the plant at the site.

Reporting related to any testing required pursuant to Conditions IV(g) or (h) shall be performed in accordance with the reporting procedures specified in Condition IV(g).

For each delivery of distillate fuel oil, 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(i); or
2. A fuel delivery receipt and documentation of sampling and analysis containing the following information:
   * + 1. 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);
       2. 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;
       3. The date and time the sample was taken;
       4. The name, address, and telephone number of the laboratory that analyzed the sample; and
       5. The test method used to determine the sulfur content

The Permittee shall prepare, by March 1 of each 5-year compliance period, and submit to the U.S. Environmental Protection Agency (EPA) or the Department upon request, a 5-year compliance certification report for the hot water heater for the previous 5-year compliance period containing the information specified in Conditions V(n)(1) and (2) as follows [40 CFR 63.11225(b)]:

1. Company name and address.
2. Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of 40 CFR 63, Subpart JJJJJJ. Your notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official:

“This facility complies with the requirements in 40 CFR 63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler.”

The Permittee shall maintain the records specified in Conditions V(o)(1) through (4) as follows:

1. The Permittee shall keep a copy of each notification and report that was submitted to comply with 40 CFR 63, Subpart JJJJJJ and this section and all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted. [40 CFR 63.11225(c)(1)]
2. The Permittee shall keep records identifying the date of tune-up, the procedures followed for tune-up, and the manufacturer’s specifications to which the boiler was tuned to document compliance with the requirements of Condition III(j). [40 CFR 63.11225(c)(2)]
3. The Permittee shall keep records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment. [40 CFR 63.11225(c)(4)]
4. The Permittee shall keep records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR 63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation. [40 CFR 63.11225(c)(5)]

The Permittee shall maintain on-site and submit, if requested by the Department, a report containing the information in Conditions (V)(p)(1) through (3) as follows [40 CFR 63.11223(b)(6)]:

1. The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.
2. A description of any corrective actions taken as a part of the tune-up of the boiler.
3. The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

If you have any questions, please call me at (202) 535-1747 or Thomas Olmstead at (202) 535-2273.

Sincerely,

Stephen S. Ours, P.E.

Chief, Permitting Branch

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