February 11, 2020

Daniel G. Schuster

Schuster Concrete Ready Mix, LLC

3713 Crondall Lane

Owings Mills, MD 21117-6207

**Re: Permit No. 7261-A1 to Construct and Operate a CEMCO Model 150 Transit Mix (Dry Batch) Concrete Plant at 3900 Wisconsin Avenue NW, Washington DC**

Dear Mr. Schuster:

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 Schuster Concrete Ready Mix, LLC (“the Permittee”) for a permit to construct and operate aCEMCO Model 150 Transit Mix (dry batch) concrete plant (electric line powered) at 3900 Wisconsin Avenue NW, Washington DC, has been received. Permission to construct and operate the concrete batch plant with associated 2.78 MMBTU/hr No. 2 fuel oil fired hot water heater, and three small cement silos per the submitted application dated June 25, 2019 as revised by the permit amendment application November 26, 2019, is granted subject to the following conditions:

I. General Requirements:

a. The approved portable batch concrete plant and associated hot water heater shall be operated in accordance with all applicable air pollution control requirements of 20 DCMR.

b. This permit expires on February 10, 2025 [20 DCMR 200.4]. If continued operation after this date is desired, the owner or operator shall submit an application for renewal by November 10, 2024.

c. Construction or 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]

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 (TSP) 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 TSP from the concrete batch plant shall not exceed 40 pounds per hour. [20 DCMR 603.1 and Appendix 6-1]
5. Visible emissions shall not be emitted from these units except that discharges not exceeding 40% opacity (unaveraged) shall be permitted for two (2) minutes in any sixty (60) minutes period and for an aggregate of twelve (12) minutes in any twenty-four (24) hours 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.*

f. 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:

1. The portable batch concrete plant shall be operated for no more than one shift [10 hours] per day, six days per calendar week and 52 weeks per calendar year. [20 DCMR 201] *Note that this is a District-enforceable only condition.*

1. The maximum allowable annual production of concrete shall be 100,000 cubic yards in any consecutive 12-month period. [20 DCMR 201] *Note that this is a District-enforceable only condition.*

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

1. All dust generated from mixer or truck loading shall be captured and vented through a fabric filter (baghouse); and

2. Cement loaded to elevated storage silos via pneumatic conveying shall be controlled by a properly sized particulate filter.

d. The dust control equipment used to comply with Condition III(c) shall meet the following standards [20 DCMR 201]:

1. The fabric filter (baghouse) shall maintain 99.9% efficiency whenever the portable batch concrete plant is operating; and

2. The silo vent filters shall maintain either a 99.9% efficiency or ensure that dust emissions do not exceed 1 microgram per standard cubic meter (mg/Nm3) or 4.3x10-4 grains per standard cubic foot (gr/SCF). [20 DCMR 201]

e. 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 2 and 6 inches of water (except as specified in Condition III(e)(3)). If, after 2 inches of water has been attained for an extended period (approximately equal to a full operating day), if the differential pressure again drops below 2 inches of water, the equipment shall be shut down and the bags inspected and replaced as needed.

3. Operations between 6 and 8 inches of water shall be permitted, but when the differential pressure begins to exceed 6 inches of water regularly, the Permittee shall make arrangements for reasonably prompt inspection of the bags and shall perform any needed replacements or maintenance.

4. Operations equal to and above 8 inches of water are not permitted. If they are observed, the equipment shall be shut down and the bags inspected and replaced as needed.

f. A set of replacement filters for each of the dust collectors shall be kept on site at all times. [20 DCMR 201]

g. 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:

i. 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

ii. 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 curbside 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:

i. Fully covering the material in question, with a tarpaulin or other material; and

ii. 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;

* + - 1. 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.
      2. 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.

h. The portable batch concrete plant and ancillary equipment, including all filters, shall be operated and maintained in accordance with the recommendations of the equipment manufacturers. [20 DCMR 201]

i. 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]

j. At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the concrete mix 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]

IV. Monitoring and Testing Requirements:

a. The Permittee shall monitor the quantity of concrete produced and operating hours of the portable concrete batch plant each day to ensure compliance with Conditions III(a) and III(b).

b. The Permittee shall monitor the differential pressure across the baghouse filters to ensure compliance with Condition III(e).

c. At least once per week, during operation of the unit, the Permittee shall conduct visual observations of the emissions from the unit from the truck or mixer-loading baghouse outlet stack, from the cement silo loading operation, 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 (e), respectively:

1. If visible emissions of fugitive dust are observed in excess of the limit specified in Condition III(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.

2. 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 III(e) are observed, operations shall be discontinued until the problem is corrected.

d. The Permittee shall monitor any odor emitted from the facility and take any actions necessary to ensure compliance with Condition II(f).

e. 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(g).

1. The Department reserves the right to require that the Permittee conduct performance tests and/or stack tests to determine compliance with Conditions II(c) and (d). In the case that a performance test or stack test is required by the Department, the Permittee shall furnish the Department with a written report of the results of such performance tests in accordance with the following procedures. [20 DCMR 502.1]
2. 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.
3. 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.
4. 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.
5. 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(f)(7).
6. 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:
   1. A statement that the owner or operator has reviewed the report from the emissions testing firm and agrees with the findings.
   2. Permit number(s) and condition(s) which are the basis for the compliance evaluation.
   3. Summary of results with respect to each permit condition.
   4. Statement of compliance or non-compliance with each permit condition.
7. 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.
8. The following address shall be used for correspondence with the Department for this performance testing:

Chief, Compliance and Enforcement Branch

Department of Energy and Environment

Air Quality Division

1200 First Street NE, 5th Floor

Washington DC 20002

g. 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]

h. 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]

i. 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(c), (d), (f), (h), and (j).

j. 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(g).

V. Record Keeping and Reporting Requirements:

The following information shall be recorded, and maintained in a log at the facility (and in a readily accessible location at an off-site location after operations cease at the facility) and made available when requested for a period of not less than three years from the date of each record (except where a longer period is specified herein). [20 DCMR 500.8]

a. The Permittee shall keep a record of the following production records:

1. The hours of operation each day to document compliance with Condition III(a);

2. The cubic yards of concrete produced each day;

3. The sum of the cubic yards of concrete produced each month, updated no later than the fifth day of each calendar month for the previous calendar month;

4. The sum of the previous 12 months of production, in cubic yards, 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(b).

b. A reading of the differential pressure gauge measuring the differential pressure across the truck or mixer-loading baghouse shall be recorded at least once each day during truck or mixer loading to document compliance with Condition III(e).

c. When new bags are installed in the primary fabric filter (baghouse), the initial differential pressure across the clean bags shall be recorded pursuant to Condition III(e)(1).

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

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

f. The Permittee shall maintain a copy of the concrete batch plant and the fabric filter manufacturers’ maintenance and operating recommendations and make such available to Department inspectors.

g. The Permittee shall maintain copies of the specifications for the bags used in the baghouse and the silo vent filters used at the site to document compliance with Condition III(d) (in the absence of more specific test data).

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

i. The Permittee shall keep records of all odors identified pursuant to Condition II(f) and IV(d) and the actions taken to correct them.

j. The Permittee shall keep records of any fugitive dust exceedances identified pursuant to Conditions III(g) and IV(e) and the actions taken to correct them.

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

l. 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(d); or
2. A fuel delivery receipt and documentation of sampling and analysis containing the following information:

A. 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);

B. 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;

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.

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

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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