December 19, 2017

Roberto Talavera

Director of Technical Services/Operations

Superior Concrete Materials, Inc.

1601 South Capitol Street SW

Washington DC 20003

**Re: Permit No. 7188 to Construct and Operate a Ready Mix Portable Concrete Batch Plant at 1721 South Capitol Street SW, Washington DC**

Dear Mr. Talavera:

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 Superior Concrete Materials, Inc. (“the Permittee”) for a permit to construct and operate a ready mix portable concrete batch plant with one (1) C&W BP-790 Pulse Jet Dust Collector (Central Dust Collector) and three (3) Silo Dust Collectors at 1721 South Capitol Street SW has been received. Permission to construct and operate the ready mix portable concrete batch plant per the submitted plans and specifications on the application received September 21, 2017, and additional information received October 27, 2017 and November 2, 2017, is granted subject to the following conditions:

I. General Requirements:

a. The approved ready mix portable batch concrete plant shall be constructed and operated in accordance with all applicable air pollution control requirements of 20 DCMR.

b. This permit expires on December 18, 2022 (20 DCMR 200.4). If continued operation after this date is desired, the Permittee shall submit an application for renewal by September 18, 2022.

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]

g. The equipment covered by this permit is intended to replace older equipment performing the same activities located at 1601 South Capitol Street SW, Washington DC. The Permittee shall:

1. Submit a notification to the Department notifying to of the first day of operation of the new facility at 1721 South Capitol Street SW;

2. Submit this notification no later than 2 days after the first date of operation;

3. Submit the notification to the following address:

Chief, Compliance and Enforcement Branch

Department of Energy and Environment

Air Quality Division

1200 First Street NE, 5th Floor

Washington, DC 20002

4. Cease all concrete production operations at the 1601 South Capitol Street SW facility no later than 30 days after the date identified in the above notification; and

5. Submit a notification no later than 7 days after the last date of operation at the 1601 South Capitol Street SW facility, to the same address listed above, notifying the Department of that last day of operation of the 1601 South Capitol Street SW facility.

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]

c. 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]

d. The discharge of TSP from the concrete batch plant shall not exceed 40 pounds per hour. [20 DCMR 603.1 and Appendix 6-1]

e. Visible emissions shall not be emitted from the equipment covered by this permit 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:

a. Operations of the ready mix portable batch concrete plant shall not exceed the following limits [20 DCMR 201]:

1. The maximum allowable concrete production rate shall be 240 cubic yard per hour;

2. The maximum allowable operating hours shall be 4,200 hour per year *(Note that this is a District-enforceable only condition)*; and

3. The maximum allowable annual production of concrete shall be 1,008,000 cubic yards per year *(Note that this is a District-enforceable only condition)*.

b. All dust generated from batching operations shall be captured and vented through the Central Dust collector. All dust generated from silo loading shall be captured and vented through the silo cartridge dust collectors. [20 DCMR 201]

c. The dust collectors shall maintain a particulate matter control efficiency of 99.9% at all times when the ready mix portable batch concrete plant is operating or one or more silos are being loaded.[20 DCMR 201]

d. The proper operation of the baghouses shall be demonstrated when the following differential pressure ranges, as measured by a magnehelic pressure gauge across the filters, are maintained [20 DCMR 201]:

1. Between 3 and 8 inches of water across the C&W BP-790 pulse jet central dust collector; and

2. Between 2 and 7 inches of water across each of the three silo dust collectors, when silo loading is occurring.

e. A full set of replacement dust collector cartridges and bag filters shall be kept on site at all times to allow for prompt replacement should a cartridge or filter fail. [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:

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.

g. The Permittee shall implement a dust control plan for the facility as follows:

1. The dust control plan shall be sufficient to ensure compliance with the requirements of Condition II of this permit;

2. The dust control plan is subject to approval by the Department. The dust control plan dated October 13, 2017 for the facility is considered approved. However, if the Department determines that, upon implementation, it does not achieve the requirement of Condition III(g)(1), the Department may require the facility to submit a revised dust control plan for approval; and

3. The Permittee may request approval of a revised dust control plan at any time, but any such plan must meet the requirements of Condition III(g)(1) and must contain the following activities, at a minimum:

i. All stock piles must be enclosed on at least three sides and covered by an awning;

ii. Material deliveries and stock piles must be regularly monitored for sufficient moisture content to ensure that negligible dust is produced by wind erosion;

iii. Material deliveries and stock piles must be wet appropriately whenever Condition III(g)(3)(ii) monitoring finds insufficient moisture content;

iv. A mechanical sweeper shall be retained to sweep the facility and adjacent lots as needed to minimize any dust carry-out; and

v. A “Load and Go Ready Mixed Truck Wash System©” shall be installed at the site and each cement truck must be washed with the system after loading is complete.

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

i. 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 ready mix concrete batch plant each day to ensure compliance with Condition III(a).

b. The Permittee shall monitor the differential pressure across the baghouse filters and cartridges at the central dust collector and the three cartridge dust collectors to ensure compliance with Condition III(d).

c. At least once per day of plant operation, during operation of the plant, the Permittee shall conduct visual observations of the emissions from the unit, including observations of the outlet stack from the central dust collector and from the outlets of the silo vents while the silos are being loaded. These observations shall also include observations of other portions of the plant to identify any fugitive emissions. If no operations are occurring during a given day, this shall be so noted. If visible emissions are observed, the following procedures shall be followed to address Conditions II(b) and II(e), 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.

2. If visible emissions of fugitive dust 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(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 stores of dust collector cartridges and filter bags to ensure compliance with Condition III(e).

f. 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).

g. The Permittee shall perform monitoring and testing as specified in the dust control plan for the facility, put in place pursuant to Condition III(g).

h. The Department reserves the right to require that the Permittee conduct performance tests to determine compliance with Conditions II(c) and (d). In the case that a performance 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]

1. The stack tests shall be performed in accordance with 40 CFR 60, Appendix A, Methods 1 through 5. The performance test shall consist of three separate one-hour runs using this test method.
2. One (1) original copy of the 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.
3. The test protocol shall be approved by the Department prior to initiating any testing. Upon approval of the test protocol, the Company shall finalize the test date with the assigned inspector in the Compliance and Enforcement Branch. The Department must have the opportunity to observe the test for the results to be considered for acceptance.
4. 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(h)(7).
5. 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 Permittee 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; and
   4. Statement of compliance or non-compliance with each permit condition.
6. 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 Permittee shall propose corrective action(s). Failure to demonstrate compliance through the test may result in enforcement action.
7. 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

i. 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]

V. Record Keeping Requirements:

The Permittee shall maintain the following records in a readily accessible location for at least three (3) years from the date the information is obtained (except where a longer document retention period is specified below) and shall make these records available to the Department upon written or verbal request. [20 DCMR 500.8]

a. The Permittee shall record in a log the differential pressure reading of the four magnehelic pressure gauges at least once each day, during operation of the equipment to ensure compliance with the operational requirements of Conditions III(b), (c), and (d) of this permit.

b. The Permittee shall maintain the following production records to document compliance with Condition III(a):

1. The total cubic yards of concrete produced each day;

2. The total hours that the plant at the facility operated each day; and

3. The total cubic yards of production each calendar month, kept in a 12-month rolling sum format (a 12-month sum, updated monthly for the previous 12 calendar months).

c. 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.

d. The Permittee shall maintain a record of all maintenance performed on the equipment to document compliance with Condition III(h). This shall include records of bag and cartridge filter change-outs as well as all other maintenance performed.

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

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

g. The Permittee shall maintain records sufficient to document that the facility has complied with the procedures set forth in the dust control plan implemented pursuant to Condition III(g).

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

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

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

j. The Permittee shall keep records of the operating conditions, raw data, and results of any testing performed pursuant to Conditions IV(h) and IV(i) for the duration of the operations of the plant at the 1721 South Capitol Street SW site.

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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