

STATE OF DELAWARE DEPARTMENT OF NATURAL RESOURCES & ENVIRONMENTAL CONTROL

DIVISION OF AIR & WASTE MANAGEMENT

AIR QUALITY MANAGEMENT SECTION Blue Hen Corporate Center 655 S. Bay Road, Suite 5 N Dover, Delaware 19901

TELEPHONE: (302) 739 - 4791 Fax No.: (302) 739 - 3106

February 3, 2011

Permit: <u>APC-2011/0027-OPERATION</u> Permit: <u>APC-2011/0028-OPERATION</u>

Permit: APC-2011/0029-OPERATION (Amendment 1)

Permit: APC-2011/0030-OPERATION

Seaford Concrete Products, LLC 60 Cubic Yards per Hour Ready-Mix Concrete Batch Plant 22288 Coverdale Road Seaford, DE 19973

ATTENTION:

Mr. Edward J. Kaye

President

Dear Mr. Kaye:

Pursuant to 7 **DE Admin. Code** 1102, Section 2, approval of the Department of Natural Resources and Environmental Control (the Department) is hereby granted for the operation of the equipment listed in Attachment A located at Seaford Concrete Products, LLC in Seaford, Delaware, in accordance with the application submitted on Form Nos. AQM-4.6 and AQM-5 dated July 14, 2010, Form Nos. AQM-1 and AQM-2 dated September 14, 2010, faxes dated September 16, 2010 and September 20, 2010, all signed by Edward Kaye, President, confirmation by phone to Edward Kaye on October 18, 2010, and letter faxed January 24, 2011 signed by Frank Fluharty, Sr., Plant Manager.

This permit is issued subject to the following conditions:

1. General Provisions

- 1.1 Representatives of the Department may, at any reasonable time, inspect this facility.
- The owner or operator shall not initiate construction, install, or alter any equipment or facility or air contaminant control device which will emit or prevent the emission of an air contaminant prior to submitting an application to the Department pursuant to 7 **DE Admin. Code** 1102, and, when applicable 7 **DE Admin. Code** 1125, and receiving approval of such application from the Department; except as exempted in 7 **DE Admin. Code** 1102 Section 2.2.
- 1.3 This permit may not be transferred to another location or to another piece of equipment or process.

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- 1.4 This permit may not be transferred to another person, owner, or operator unless the transfer has been approved in advance by the Department. Approval (or disapproval) of the permit transfer will be provided by the Department in writing. A request for a permit transfer shall be received by the Department at least thirty (30) days before the date of the requested permit transfer. This request shall include:
 - 1.4.1 Signed letters from each person stating the permit transfer is agreeable to each person; and
 - 1.4.2 An Applicant Background Information Questionnaire pursuant to 7 <u>Del C</u>, Chapter
 79 if the person receiving the permit has not been issued any permits by the Department in the previous five (5) years.

2. Emission Limitations

- 2.1 Air contaminant emission levels shall not exceed those specified in 7 **DE Admin. Code** 1100 and the following:
 - 2.1.1 Particulate Matter (PM10) Emissions
 PM10 emissions shall not exceed 0.06 pounds per day and 0.007 tons per twelve
 (12) month rolling period;
 - 2.1.2 Total Particulate Matter (PM) Emissions
 - 2.1.2.1 Particulate emissions shall not exceed 0.2 pounds per day and 0.02 tons per twelve (12) month rolling period.
 - 2.1.2.2 Particulate emissions shall not exceed 0.2 grains of particulate matter per standard cubic foot of exhaust air from each dust collector.
- No person shall cause or allow the emission of visible air contaminants and/or smoke from a stationary or mobile source, the shade or appearance of which is greater than twenty (20%) percent opacity for an aggregate of more than three (3) minutes in any one (1) hour or more than fifteen (15) minutes in any twenty-four (24) hour period.
- Odors from this source shall not be detectable beyond the plant property line in sufficient quantities such as to cause a condition of air pollution.

3. Operational Limitations

- 3.1 The owner or operator shall comply with the following operational limits:
 - 3.1.1 Fugitive emissions shall not be emitted in such quantities as to cause or create a condition of air pollution from material-handling operations, the stockpiling of materials or vehicular traffic entering or leaving the facility. Dust control measures shall be employed on all non-paved access roads and driveways to the facility to minimize fugitive emissions from vehicular traffic entering or leaving. Dust control measures shall include methods such as water tanker/sprinkler trucks, water sprinkler systems, dust retardant sprays, etc.

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- 3.1.2 The concrete plant's hours of operation shall not exceed 8 hours per day, 46 hours per week, and 52 weeks per year, totaling 2,392 hours per rolling twelve (12) month period.
- 3.1.3 The maximum production of concrete shall not exceed 60 yards per hour (121 tons per hour) and 143,853 yards per rolling twelve (12) month period (289,432 tons per rolling twelve (12) month period).
- 3.1.4 The silos shall only be filled with Portland Cement or Fly Ash.
- 3.1.5 The Company shall operate, on a daily basis, in accordance with the Company's Operating Procedures for Dust Control plan. The plan shall include, but is not to be limited to: paving all traffic areas within the facility, stating methods to maintain all traffic areas dust free, using washed stone, and constructing and maintaining permanent and natural barriers around aggregate stockpiles.
- 3.2 For the process equipment and associated air pollution control equipment, the owner or operator shall comply with the following operational limits:
 - 3.2.1 The Company shall demonstrate compliance with the emission limitations by the proper use of dust collectors to control particulate emissions.
 - 3.2.2 Proper operation of the dust collectors shall include implementation of a Dust Collector Preventative Maintenance and Malfunction Plan acceptable to the Department. The plan shall include the following minimum requirements:
 - 3.2.2.1 Specifications for the dust collectors including minimum and maximum pressure drop readings that define a proper operating range.
 - 3.2.2.2 Daily monitoring of pressure drop across the dust collectors and comparison to the proper operating range.
 - 3.2.2.3 Quarterly inspection of the dust collector for leaks, wear, corrosion, dust accumulation, etc.
 - 3.2.2.4 Routine maintenance as recommended by the manufacturer.
 - 3.2.2.5 Troubleshooting procedures.
 - 3.2.2.6 Required record keeping.
 - 3.2.2.7 Schedule for review and update of the plan.
 - 3.2.2.8 The cement, fly ash, and weigh batcher dust collectors shall utilize filters with an efficiency of at least 99.99%.
 - 3.2.2.9 The truck loading (central) dust collector shall utilize filters with an efficiency of at least 99.9%.

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- 3.2.3 No process equipment that vents to the atmosphere shall be operated unless the corresponding air pollution control equipment is operating properly.
- 3.2.4 Each dust collector except the weigh batcher dust collector shall be equipped with a pressure differential gauge.
- 3.2.5 The pressure differential gauge shall be operating properly when the equipment is operating and in accordance with Condition 4.2.
- 3.3 At all times, including periods of startup, shutdown, and malfunction, the owner or operator shall, to the extent practicable, maintain and operate the facility including associated air pollution control equipment 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.
- 3.4 All structural and mechanical components of the equipment or process covered by this Permit shall be maintained in proper operating condition.
- The operational limitations of Conditions 3.1.3 are voluntary restrictions taken by the Company to limit emissions of PM2.5 to below the five (5) ton per year applicability threshold of 7 **DE Admin. Code** 1125, Section 4, *Minor New Source Review.* The Company shall meet the control technology requirements of *Minor New Source Review*, 7 **DE Admin. Code** 1125, Section 4, if the Company requests an increase in production, that results in a PM2.5 Potential to Emit above five tons per year.

4. Testing and Monitoring Requirements

- 4.1 The Department reserves the right to require that the owner or operator perform emission tests using methods approved in advance by the Department.
- 4.2 For the process equipment and associated air pollution control equipment, the Company shall monitor the following:
 - 4.2.1 The Company shall record the pressure drop across the dust collectors (except the weigh batcher dust collector) at least once during each day and compare the result to the standard set in the Dust Collector Preventative Maintenance and Malfunction Plan. If the pressure drop is outside the defined range then the Company shall institute corrective action as set in the plan. If the pressure drop cannot be restored to the normal operating range within twenty-four (24) hours, the unit shall be shut down and the Department shall be notified of the deviation.
 - 4.2.2 The Company shall inspect each dust collector according to the schedule set in the Dust Collector Preventative Maintenance and Malfunction Plan.

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- 4.3 The Company shall conduct a daily survey during daylight hours when the equipment is in operation to detect the presence or absence of visible emissions according to the following procedure:
 - 4.3.1 "Survey of emission point for the presence or absence of visible emissions" shall be defined as a minimum period of five (5) consecutive minutes. The survey of the emission units concurrently is acceptable provided all emission points are easily observable from the observer's position.
 - 4.3.2 The detection of the presence or absence of visible emissions shall be in accordance with the procedures of EPA Reference Method 22 (40 CFR 60, Appendix A) paragraphs 4 and 5.
 - 4.3.3 If visible emissions are observed from an emission point for three (3) consecutive minutes during a survey, the observation shall be stopped and corrective actions per Condition 4.4 shall be taken.
 - 4.3.4 The procedure does not require that the opacity of the emissions be determined. Since this procedure requires only the determination of whether a visible emission occurs and does not require the determination of opacity levels, observer certification according to the procedures of EPA Reference Method 9 (40 CFR 60, Appendix A) are not required. However, it is necessary that the observer is educated on the general procedures for determining the presence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor).
- 4.4 If visible emissions are observed, the Company shall initiate troubleshooting procedures as outlined in the Dust Collector Preventative Maintenance and Malfunction Plan.
- 4.5 The Company shall conduct a daily survey of visible emissions to establish compliance with the visible emissions standard of Condition 2.2 for each of the following units:
 - 4.5.1 Cement filter vent
 - 4.5.2 Fly ash filter vent
 - 4.5.3 Weigh batcher filter vent
 - 4.5.4 Truck mix (central) filter vent

5. Record Keeping Requirements

- 5.1 The owner or operator shall maintain all records necessary for determining compliance with this permit in a readily accessible location for five (5) years and shall make these records available to the Department upon written or verbal request.
- 5.2 The following information shall be recorded, initiated and maintained in a log each day.
 - 5.2.1 The Operating Procedures for Dust Control Plan shall include:

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- 5.2.1.1 Statements that proper fugitive dust control measures were properly employed.
- 5.2.1.2 Dates, name of person doing the inspection, and description of inspections and maintenance performed on the dust collectors and other dust control equipment.
- 5.2.1.3 The occurrence and duration of any malfunction of the dust collectors.
- 5.2.1.4 The methods to control fugitive dust emissions as detailed in the required plan of Condition 3.1.5 have been followed daily.
- 5.2.1.5 The date, time and the nature of any complaints concerning air emissions or odors. The date and method of the corrective action should also be recorded. If necessary, the corrective action should be added to the required plan of Condition 3.1.5.
- 5.2.2 Compliance with Conditions Nos. 2.2, 2.3, 3.1.1 and 4.2.
- 5.2.3 The daily hours of operation of the concrete plant.
- 5.2.4 Daily yards of concrete produced.
- 5.2.5 Daily tons of aggregate, sand, cement and fly ash used.
- 5.2.6 Identification of silo raw materials.
- 5.2.7 All observations of visible emissions made according to Condition 4.3.
- 5.3 The following information shall be recorded, initialed and maintained in a file:
 - 5.3.1 The Dust Collector Preventative Maintenance and Malfunction Plan shall include:
 - 5.3.1.1 Each day, the date, time, and results of the pressure drop across the filters and comparison to the proper operating range.
 - 5.3.1.2 All inspections of the filter structure, including the date of the inspections, person doing the inspections, and the findings.
 - 5,3.1.3 Routine maintenance as recommended by the manufacturer.
 - 5.3.1.4 Troubleshooting procedures.
 - 5.3.1.5 Schedule for review and update of the plan.
 - 5.3.1.6 Cartridge filter efficiency (manufacturer's specification).
- 5.4 Monthly and cumulative rolling twelve (12) month totals shall be calculated and recorded each month in a log for:
 - 5.4.1 The hours of operation of the concrete plant.

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- 5.4.2 The yards of concrete produced.
- 5.4.3 The tons of aggregate, sand, cement, and fly ash used.
- 5.5 The rolling twelve (12) month total emissions shall be calculated and recorded each month in a log for each of the following pollutants.
 - 5.5.1 PM10
 - 5.5.2 PM

6. Reporting Requirements

- 6.1 Emissions in excess of any permit condition or emissions which create a condition of air pollution shall be reported to the Department immediately upon discovery by calling the Environmental Emergency Notification and Complaint number, (800) 662-8802.
- In addition to complying with condition 6.1 of this permit, any reporting required by 7 DE Admin. Code 1203 "Reporting of Discharge of a Pollutant or an Air Contaminant", and any other reporting requirements mandated by the State of Delaware, the owner or operator shall for each occurrence of excess emissions, within thirty (30) calendar days of becoming aware of such occurrence, supply the Department in writing with the following information:
 - 6.2.1 The name and location of the facility;
 - 6.2.2 The subject source(s) that caused the excess emissions;
 - 6.2.3 The time and date of the first observation of the excess emissions:
 - 6.2.4 The cause and expected duration of the excess emissions;
 - 6.2.5 For sources subject to numerical emission limitations, the estimated rate of emissions (expressed in the units of the applicable emission limitation) and the operating data and calculations used in determining the magnitude of the excess emissions; and
 - 6.2.6 The proposed corrective actions and schedule to correct the conditions causing the excess emissions.
- 6.3 One original and one copy of all required reports shall be sent to the address below:

Division of Air Quality Blue Hen Corporate Center 655 S. Bay Road, Suite 5 N Dover, DE 19901 Permit: APC-2011/0027-OPERATION Permit: APC-2011/0028-OPERATION

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7. Administrative Conditions

- 7.1 This permit supersedes **Permit:** <u>APC-2011/0029-OPERATION</u> dated December 10, 2010.
- 7.2 This permit shall be made available on the premises.
- 7.3 Failure to comply with the provisions of this permit may be grounds for suspension or revocation.

Sincerely,

Paul E. Foster, P.E. Program Manager

Engineering & Compliance Branch

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ATTACHMENT A Seaford Concrete Products, LLC Permitted Equipment

- A] One C&W Manufacturing & Sales Co. (C&W) Model CP-LPR-8-S pulse jet dust collector (99.99% efficiency, eight 8" dia. x 39" long filters in one compartment, 2340 ACFM). This bin stores fly ash according to **Permit:** APC-2011/0027-OPERATION.
- B] One C&W Model CP-LPR-6-S pulse jet dust collector (99.99% efficiency, six 8" x 39" long filters in one compartment, 1760 ACFM). This bin stores cement according to **Permit: APC-2011/0028- OPERATION**.
- C] One C&W Model CP35 pulse jet dust collector (99.99% efficiency, two 8" dia. x 19" long filters in one compartment, 216 ACFM). This collector services the weigh batcher according to **Permit:** APC-2011/0029-OPERATION.
- One C&W RA140 reverse air dust collector (99.9% efficient, thirty-six 8" dia. x 114" long filters in each of two compartments, 6500 ACFM). This collector services the truck mix station and serves as a central dust collector according to **Permit: APC-2011/0030-OPERATION**.

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