



STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES  
& ENVIRONMENTAL CONTROL  
DIVISION OF AIR & WASTE MANAGEMENT

AIR QUALITY MANAGEMENT  
SECTION

156 S. STATE STREET  
DOVER, DELAWARE 19901

TELEPHONE: (302) 739 - 9402  
FAX No.: (302) 739 - 3106

November 21, 2008

**Permit: APC-2009/0042-CONSTRUCTION**

Kent County Levy Court  
Water Scrubber for Biosolids Processing  
Kent County Regional Wastewater Treatment Facility  
139 Milford Neck Road  
Milford, DE 19963

ATTENTION: Jim Newton, P.E., BCEE  
Environmental Program Manager

Dear Mr. Newton:

Pursuant to the State of Delaware Regulation No. 1102, Section 2, approval of the Department of Natural Resources and Environmental Control (the Department) is hereby granted for the construction of a CMI Schneible Company model F41C water scrubber located at the Kent County Regional Wastewater Treatment Facility in Milford, Delaware, in accordance with the application submitted on Form Nos. AQM-1, AQM-2, AQM-3.1, AQM-4.4, AQM-5 and AQM-6 dated September 17, 2008 signed by Reinhold Betschel.

This permit is issued subject to the following conditions:

**1. General Provisions**

- 1.1 This permit expires on May 15, 2009. If the equipment covered by this permit will not be constructed by May 15, 2009, a request to extend this construction permit must be submitted by April 1, 2009.
- 1.2 The project shall be constructed in accordance with the application described above. If any changes are necessary, revised plans must be submitted and supplemental approval issued prior to actual construction.
- 1.3 Representatives of the Department may, at any reasonable time, inspect this facility.
- 1.4 This permit may not be transferred to another location or to another piece of equipment or process.
- 1.5 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:

- 1.5.1 Signed letters from each person stating the permit transfer is agreeable to each person; and
  - 1.5.2 An Applicant Background Information Questionnaire pursuant to 7 Del C, Chapter 79 if the person receiving the permit has not been issued any permits by the Department in the previous five (5) years.
- 1.6 The applicant shall, upon completion of the construction, installation, or alteration, request that the Department grant approval to operate.
- 1.6.1 A separate application to operate pursuant to Regulation No. 1102 does not need to be submitted to the Department for the equipment or process covered by this construction permit. Upon a satisfactory demonstration by an on-site inspection that the equipment or process complies with all of the terms and conditions of this permit, the Department shall issue a Regulation No. 1102 Operating Permit for this equipment or process.
  - 1.6.2 The applicant shall notify the Department sufficiently in advance of the demonstration and shall obtain the Department's prior concurrence of the operating factors, time period, and other pertinent details relating to the demonstration.
  - 1.6.3 The provisions of Regulation No. 1102 Sections 2.1 and 11.3 shall not apply to the operation of equipment or processes for the purposes of initially demonstrating satisfactory performance to the Department following construction, installation, modification, or alteration of the equipment or processes.
- 1.7 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 Regulation No. 1102, and, when applicable Regulation No. 1125, and receiving approval of such application from the Department; except as exempted in Regulation No. 1102 Section 2.2.

## **2. Emission Limitations**

- 2.1 Air contaminant emission levels shall not exceed those specified in the State of Delaware "**Regulations Governing the Control of Air Pollution**" and the following:
  - 2.1.1 Particulate Matter (PM-10) Emissions  
PM-10 emissions shall not exceed 5.0 pounds per day and 0.65 tons per twelve (12) month rolling period.
- 2.2 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.

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- 2.3 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 Emissions from the sludge dryers shall be controlled by the scrubber.
  - 3.1.2 The sludge dryers shall not be operated unless the scrubber is functioning properly.
  - 3.1.3 The scrubber shall be operated with a functional pressure differential gauge. The pressure drop shall be within a range of 2 to 12 inches of water column.
  - 3.1.4 A flow meter shall be installed on the inlet water supply line to the scrubber. The flow meter shall be installed where plant personnel can easily read it.
  - 3.1.5 The Company shall perform daily qualitative visual observation of the scrubber stack. If opacity is observed, the Company shall troubleshoot the system to correct the problem.
  - 3.1.6 The scrubber shall be operated and maintained in accordance with the manufacturer's recommendations.
  - 3.1.7 Operating hours shall not exceed 6,240 hours on a rolling twelve month basis.
- 3.2 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.
- 3.3 All structural and mechanical components of the equipment or process covered by this Permit shall be maintained in proper operating condition.

**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.

**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, initialed and maintained in a logbook:
  - 5.2.1 Each shift, the pressure drop across the scrubber in inches of water.
  - 5.2.2 All routine and non-routine maintenance performed on the scrubber and ancillary equipment.
  - 5.2.3 Daily qualitative visual observation of the scrubber stack and steps taken to troubleshoot the operation when opacity is observed.
  - 5.2.4 Each shift, the flow rate of the scrubbing liquid in gallons per minute.
  - 5.2.5 Each shift, the operational status of the scrubber.
  - 5.2.6 Daily, monthly, and rolling twelve-month operating hours.
- 5.3 The rolling twelve (12) month total emissions shall be calculated and recorded each month in a log for each of the following pollutants.
  - 5.3.1 Particulate Matter (PM-10)

**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.
- 6.2 In addition to complying with Condition 6.1 of this permit, any reporting required by 7 Del C §6028 "**Reporting of a 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.

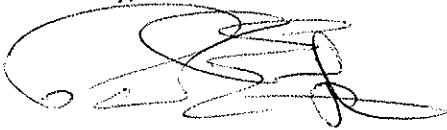
- 6.3 One (1) original and one (1) copy of all required reports shall be sent to the address below:

Air Quality Management Section  
Division of Air and Waste Management  
156 South State Street  
Dover, DE 19901

**7. Administrative Conditions**

- 7.1 This permit shall be made available on the premises.
- 7.2 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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pc: Dover File  
Melanie Smith