



**CF Industries, Inc.**  
**Plant City**  
**Phosphate Complex**  
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January 25, 2008

Florida Department of Environmental Protection  
Bureau of Air Regulation  
2600 Blair Stone Road, MS #5505  
Tallahassee, Florida 32399-2400

RECEIVED

JAN 30 2008

Attention: Ms. Trina Vielhauer, Chief

BUREAU OF AIR REGULATION

**RE: CF Industries, Inc.**  
**Draft Permit No. 0570005-023-AC**  
**CF Industries Plant City Phosphate Complex**  
**Best Available Retrofit Technology (BART) Project**  
**Comments on Draft BART Permit**

Dear Ms. Vielhauer

CF Industries, Inc. (CFI) has received a draft air construction permit from the Florida Department of Environmental Protection (FDEP) for the Best Available Retrofit Technology (BART) eligible emissions units at the CFI Plant City Phosphate Complex facility, dated December 24, 2007. The draft permit package includes the public notice, Technical Evaluation and Preliminary Determination (TE&PD), and the draft permit. CFI and Golder Associates Inc. (Golder) have reviewed the draft permit package. We have also considered the Department's comments during our teleconference of January 22 to review the draft BART permit. Our comments on the draft permit package are presented below. We ask that the Department consider and incorporate each of these comments in issuing the final BART permit, and we look forward to discussing these issues further with you and your staff.

**Technical Evaluation and Preliminary Determination**

**Page 3 of 14, Regulatory Authority:** 1st paragraph- This "project" is not subject to all regulations as indicated. Individual emissions units or the facility as a whole may be subject to the listed regulations, but not due to the BART project.

**Page 12-13, BART Analysis and Preliminary BART Determination for DAP/MAP Plants, BART Analysis for PM/PM<sub>10</sub>:**

- As shown in Table 2 of the TE&PD, the maximum visibility impact due to all the DAP/MAP plants is only 0.06 dv compared to about 0.75 dv from all the SAPs. Therefore, no amount of PM emissions reduction from the MAP/DAP plants will have any meaningful improvement in visibility impacts. However, if FDEP wants to impose BART PM limits for the MAP/DAP plants, they should be specified as lb/hr caps and not as lb/ton since the analysis for the visibility impact is based on maximum mass

emission rates. A limit at reduced production rate will only have a lesser visibility impact and should not be considered to be a BART limit.

- The Y MAP/DAP plant is currently undergoing a pilot test where several scrubbing media are being evaluated in order to address RCRA issues related to the spent scrubbing liquid. Based on the results of the pilot test, CF expects to submit an air construction application to modify the operation of the scrubber systems on A, X, Y and Z MAP/DAP Plants. CF also believes that the modified scrubbing systems may result in somewhat different (slightly higher) PM emissions. In addition, the historic data from the A, X, Y, and Z MAP/DAP Plants will no longer be representative under the new scrubbing systems configuration. Therefore, CF proposes a compliance plan to allow time until November, 2013 to gather PM compliance test data with the new scrubbing systems configuration. Since BART does not have to be implemented until 2014 at the latest, it is prudent to allow time to gather this data prior to setting the BART emission limits. Language for the Compliance Plan is provided below.

### **Draft Permit**

#### **Page 7 of 13, Monitoring Requirements**

Condition 15: Please revise the condition to state that the permittee shall monitor and record the scrubber pressure drop and liquid flow rate only for SAPs A and B. SAPs C and D are double absorption plants and do not have ammonia scrubbers.

Please change the monitoring frequency to one every 12-hour shift because CF operates two shifts per day which are each 12 hours long.

#### **Page 7 of 13, Emissions Testing**

Condition 18: Clarification needed for the note that says “when SO<sub>2</sub> CEMS are required to demonstrate compliance on a continuous basis, no initial or annual compliance tests are necessary.” Needs to be restated as “no initial or annual compliance tests for SO<sub>2</sub> are necessary.”

Specific testing requirements for SAP A for SAM should also be stated if it is the Department’s intent to require SAM testing.

#### **Page 9-10 of 13, BART Emissions Standards**

Condition 4: As previously discussed, remove the lb/ton limit. Also, this condition sets limits for both PM and PM<sub>10</sub>, and requires testing of PM<sub>10</sub> emissions by EPA Method 201A. However, the PM and PM<sub>10</sub> limits are the same, therefore if testing for PM is conducted and demonstrates compliance, testing separately for PM<sub>10</sub> should not be required.

Maintain the current PM emissions limits for the MAP/DAP Plants pending the completion of the Compliance Plan.

#### **Page 11 of 13, Emissions Testing**

Condition 11.a: Delete testing for PM<sub>10</sub> emissions, since testing for PM is sufficient.

### **Proposed Compliance Plan**

In order to provide time to further investigate the actual PM emissions from the modified A, X, Y, and Z DAP/MAP Plant scrubbing systems, CF proposes after the issuance of the permit and completing the modifications, to conduct a series of tests on the units over a 3-year period in order to determine longer-term variability in emissions. This long term test period is necessary in order to assess the long term variability of the emissions under the new scrubbing systems.

Subsequent to this testing evaluation, CF will present the data to the Department along with a proposed BART emission limit. This information will be presented to the Department no later than 38 months following issuance of the modification permit. The proposed compliance plan is presented below:

1. Within the 3-year period following the permit issuance and completion of the modification, the permittee shall conduct a minimum of nine (9) stack test runs for PM emissions on each of the A, X, Y, and Z DAP/MAP Plant stacks. During testing, the permittee shall monitor and record the scrubber parameters as required by the HF MACT, input process rate, fuel usage, and other process parameters.
2. The permittee shall provide at least 15 days notice to the Department prior to conducting the stack testing.
3. No later than thirty-eight (38) months following issuance of this permit and completion of the modification, the permittee shall submit the results of the testing program, and a report with the proposed BART emissions limit for each plant.

### **Alternative BART Compliance Strategy**

Based on a recent discussion with the Department regarding the BART issues at a similar plant, the Department may consider alternative strategies which achieve equivalent or greater visibility reductions in the Class I area as those achieved by the draft BART permit. Alternatives could include non-BART emission units. CFI will continue to evaluate such alternatives and inform the Department of any strategies which they may like to pursue. This will include the possibility of lowering the deciview impact of the BART-eligible source to below the exemption criteria of 0.5 deciview, in order to become exempt from BART. Proposed permit language to allow for this is provided below.

“Prior to expiration of this BART permit, the applicant may apply to the Department for an alternative BART compliance strategy which achieves equal or greater visibility reduction in the Class I area as achieved by this BART permit. This may include a BART strategy which results in a visibility impact of the BART-eligible source of less than 0.5 deciview, thereby exempting the facility from BART requirements.”

Thank you for consideration of these comments. If you have any questions, please do not hesitate to call me at (813) 782-1591.

Sincerely,



Ronald L. Brunk  
Superintendent, Environmental Affairs

Enclosures

cc: D. Buff  
B. May  
T. Edwards  
R. Manning

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