

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

March 22, 2006

4APT-APB

Mr. Ronald Methier, Chief  
Air Protection Branch  
Environmental Protection Division  
Georgia Department of Natural Resources  
4244 International Parkway, Suite 120  
Atlanta, GA 30354

Dear Mr. Methier:

Thank you for sending the prevention of significant deterioration (PSD) preliminary determination and draft permit dated February 6, 2006, for CertainTeed Corporation to modify a wool fiberglass manufacturing facility located in Athens, Georgia. The proposed construction consists of the permanent shutdown of an oxy-fired furnace and replacing it with a larger electric furnace, the expansion of an unbonded fiberglass manufacturing line and the installation of a new bonded manufacturing line, and the modification of the raw material delivery/handling and binder preparation system. Based on the applicant's emission estimates, the project is subject to PSD review for particulate matter (PM/PM<sub>10</sub>), volatile organic compounds (VOC), and carbon monoxide (CO).

We have reviewed the Georgia Environmental Protection Division's (GEPD's) preliminary determination and draft permit as well as the permit application. Our comments are as follows. In these comments the term "you" refers to GEPD and the terms "we" and "our" refer to the Region 4 office of the U.S. Environmental Protection Agency (EPA).

1. Comments on Best Available Control Technology (BACT) Assessment
  - a. Unbonded Manufacturing Line (A-23) Particulate Matter Emissions - The proposed BACT limit for the unbonded A-23 line is 4.72 lb/ton glass pulled. In support of this limit you cite the 2.4 lb/ton BACT limit for CertainTeed's Kansas City facility and the measured emissions from the existing A-23 line of 2.12 lb/ton. You attribute the differences among these values to differences in test methods and state that 4.72 lb/ton limit using Method 5E is comparable to the 2.4 lb/ton limit using Method 5/202. We have the following questions about this. (1) What information did you use to equate a Method 5/202 value of 2.4 lb/ton to a Method 5E value of 4.72 lb/ton? Is there always the same consistency between the two test methods or can the relationship vary on a case-by-case basis? (2) How do you know that the CertainTeed Kansas City limit is based on use of Method 5/202 rather than Method 5E? (3) Why is the BACT limit equivalent to 2.4 lb/ton rather than the lower measured line A-23 emission rate of 2.12 lb/ton?

- b. Unbonded Manufacturing Line (A-23) Particulate Matter Emissions - Use of a wet electrostatic precipitator (ESP) was eliminated as BACT for control of particulate matter emissions from the A-23 line on the basis of cost. However, CertainTeed has proposed and you have accepted use of a wet ESP as BACT for the new A-25 line. It is not clear to us why a wet ESP is appropriate for the A-25 line but not for the A-23 line. We request that you provide an explanation in the final determination.
- c. Combined (A-23 and A-25) Particulate Matter Emissions - We have previously discussed with you the feasibility of controlling particulate matter emissions from both the A-23 and the A-25 lines using a single large wet ESP. We request that you explain in the final determination why this configuration was rejected.
- d. Unbonded Manufacturing Line (A-23) VOC emissions - The BACT analysis should include every emissions unit that will emit a regulated NSR pollutant subject to PSD review. We do not see a BACT analysis for VOC emission increases from the A-23 unbonded line.
- e. Bonded Manufacturing Line (A-25) Carbon Monoxide Emissions - The proposed CO BACT limit is 3.90 lb/ton for the bonded line, and the proposed BACT is combustion control with compliance demonstrated through performance testing. Will the facility be required to conduct another performance test after the initial test to determine continued compliance?
- f. Bonded Manufacturing Line (A-25) VOC Emissions - The wet scrubbing and biofiltration control technologies were eliminated during the BACT analysis apparently due to your view that these technologies are not technically feasible. However, please note that the reasons given for eliminating these technologies can be more accurately characterized as technical difficulty reasons and not technical infeasibility reasons.
- g. Bonded Manufacturing Line (A-25) VOC Emissions - The selected BACT control method for VOC emissions from the A-25 line is described as “process modifications.” As a minor point, the word “modification” does not seem the appropriate word for a process that has not yet been constructed. Perhaps a better description would be “pollution prevention design” or something similar. Our main point, however, is that the chosen VOC control method includes the following (according to the discussion on page 15 of the preliminary determination): “CertainTeed will use a water spray just prior to the binder application. The water will cool the hot fibers, thereby reducing the potential for binder flash off and evaporation.” Since use of a water spray seems to be a feature leading to the BACT determination, the final permit should include a

requirement that a water spray device must be installed as part of the A-25 line and must be operated at all times when fibers are produced.

- h. Handling Operations Particulate Matter Emissions - Starting on page 19 of the preliminary determination, you provide a discussion of PM BACT for “Raw Material Handling, Product Packaging, and Cutting and Slitting.” You do not indicate that this discussion is just for the new A-25 line. However, the selected BACT control method identified in this discussion is a baghouse, and we understand that only the A-25 line will include a baghouse as a control for the listed operations (cutting and slitting, etc.). In the final determination, this section should be expanded to include the BACT control method for the A-23 line, or else you should clarify that a baghouse will be used to control PM emissions from all operations involving raw material handling, product packaging, and cutting and slitting if this is the case.

## 2. Comments on Air Quality Impact Assessment

- a. Ozone - The proposed project is subject to PSD review for VOC emissions. VOC is a regulated NSR pollutant because it is a precursor to ozone formation. You did not comment in the preliminary determination on the possible effect of VOC emissions on ozone levels. We recommend that the final determination include (1) an acknowledgment that VOC emissions are precursors to ozone formation and (2) a conclusion that the relatively small increase in VOC emissions is not likely to cause or contribute to adverse ambient ozone concentrations.
- b. Fine Particles - The preliminary determination does not provide an assessment of the possible effect of the project on ambient PM<sub>2.5</sub> concentrations. Until federal PM<sub>2.5</sub> implementation rules are finalized, EPA guidance holds that PM<sub>10</sub> can be used as a surrogate for PM<sub>2.5</sub>. Therefore, we recommend that the final determination include a statement to the effect that GEPD has concluded the project will not cause or contribute to adverse ambient PM<sub>2.5</sub> concentrations based on an assessment of PM<sub>10</sub> impacts.
- c. Particulate Matter Modeling - You have selected a BACT particulate matter emissions limit for the A-25 line of 3.63 lb/ton glass pulled representing total particulate matter. In the preliminary determination where you discuss the derivation of this limit (the discussion under Step 5 on page 12), you mention test results from CertainTeed’s Kansas facility showing PM emissions of 3.63 lb/ton and PM<sub>10</sub> emissions of 2.02 lb/ton. Because your proposed emissions limit does not distinguish between PM and PM<sub>10</sub>, please confirm that the PM<sub>10</sub> air quality modeling analysis for the project was based on the total emissions limit of 3.63 lb/ton and not some lower amount. (We did not receive the entire modeling analysis and could not verify this on our own.)

If you have any questions regarding the comments in this letter, please call Jim Little at (404) 562-9118 or Brandi Jenkins at (404) 562-9124.

Sincerely,

/s/

Gregg M. Worley  
Chief  
Air Permits Section