Memorandum

Florida Department of
Environmental Protection

To: Mike Halpin, Division of Air Resource Management

Through: Trina Vielhauer, Division of Air Resource Management
Jeff Koerner, Permitting and Compliance Section

From: Christy DeVore, Permitting and Compliance Section

Date: May 23, 2011

Subject: Final Air Permit No. 0530021-031-AC
CEMEX Construction Materials Florida, LLC, Brooksville South Cement Plant
Temporary Trials of Alternative Fuels

The final permit for this project is attached for your approval and signature. The project requires a minor air construction permit to authorize temporary trials to co-fire coal with the following alternative fuel materials in the existing cement kiln to gather operational and emissions data: non-chlorinated agricultural plastics, tire-derived fuel including tire fluff, reject roofing shingles, clean woody biomass, agricultural fibrous organic byproducts, pre-consumer reject paper, carpet-derived fuel and on-specification used oil generated off-site. The final permit limits the amounts of each material and each trial is limited to no more than 90 operational days of firing the alternative fuel material. The original draft permit was revised from no more than 60 operational days to 90 for the temporary trial period in the revised draft permit. Other changes made from the original draft permit to the revised draft permit include the following:

- The requirement for testing with both the raw mill up and down was revised to: If alternative fuels are only fired with the raw mill up, then the test may be conducted only with the raw mill up; otherwise separate tests shall be conducted with the raw mill up and the raw mill down.
- The requirement for material supplier of manufacturer certification, analytical results and the amount was changed from each delivery to the first delivery. The sampling and analyses the facility performs was reduced to three, separate representative composite samples (which may including the first day sample and any obtained during stack tests) that were taken at least three operating days apart.
- The requirement for particulate matter and metals stack testing was removed. Opacity is monitored and metal sampling is required. The requirement for pesticide stack testing was changed to only required if analytical data detects pesticides in the non-chlorinated agricultural plastics.
- The following provision was added due to the unexpected problems facilities have experienced during trial burns: Due to extenuating circumstances, the permittee may request that the Bureau of Air Regulation extend the allowable operating days to finish firing the permitted amount of alternative fuel.
- The time period to remove the alternative fuel materials not burned from the site has been extended from 7 days to within 30 days of completing the trial.

The following emissions will be continuously monitored during each trial: carbon monoxide, nitrogen oxides, sulfur dioxide, total hydrocarbons and stack opacity. Stack testing is required for: dioxin/furans; hydrochloric acid; and pesticides while firing non-chlorinated agricultural plastics if pesticides are detected in the samples. The plant must continue to comply with all emissions standards in the current Title V air operation permit.

The proposed work will be performed at the existing Brooksville South Cement Plant, which is located in Hernando County at 10311 Cement Plant Road in Brooksville Florida. The project is not considered a new source review reform project.

The attached Final Determination summarizes the publication and comment process. There are no pending petitions for administrative hearings or extensions of time in which to file a petition for an administrative hearing. I recommend your approval of the attached final permit for this project.

Attachments

TLV/jfk/scd