



Florida Department of Environmental Protection

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2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
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Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

June 22, 2007

Sent By E-Mail - Received Receipt Requested

Mr. Neil Smith, V.P. of Sugar Processing Operations
United States Sugar Corporation
Clewiston Sugar Mill and Refinery
111 Ponce DeLeon Avenue
Clewiston, FL 33440

Re: **Request for Additional Information**
United States Sugar Corporation, Clewiston Sugar Mill and Refinery
Project No. 0510003-044-AC (PSD-FL-389)
Application to Fire Wood Chips in Boiler 7

Dear Mr. Smith:

On May 24, 2007, the Department received your application and sufficient fee for an air construction permit to authorize the firing of wood chips in existing Boiler 7 located at the Clewiston sugar mill. The application is incomplete. In order to continue processing your application, the Department will need the additional information requested below. Should your response to any of the items below require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

1. The project proposes to fire up to 25% of the maximum annual heat input rate to Boiler 7 with wood, which is equivalent to 179,580 tons per year of wood. The boiler will be fired with 100% wood to meet the necessary steam demands of the mill and refinery. Wood will only be fired as a startup fuel and during the refinery season (May through September). Wood will not be blended with bagasse because the existing equipment cannot currently handle these fuels at the same time. The purpose of the project is to displace the distillate oil typically fired during the refining season with wood, a renewable biomass.
 - a. Is this an accurate description of the project?
 - b. Describe how the fuel feed system will handle the switch between bagasse and wood. Identify the physical changes that would be necessary to blend and convey wood with bagasse.
 - c. Describe how the wood will be delivered, stored, chipped, handled and conveyed.
 - d. Describe the procedures for ensuring that treated or painted wood is not present in the materials received.
 - e. Will bottom and fly ash generated from wood firing be field spread?
 - f. Will wood *only* be fired as a startup fuel and during the refinery season?
2. Based on previous annual operating reports, it appears that distillate oil firing has ranged from 4% to 15% of the total heat input rate to Boiler 7. However, other boilers are also used during the refinery season.
 - a. Identify the steam demands of the refinery season. For Boiler 7, identify the corresponding heat input rate to achieve this level of steam.

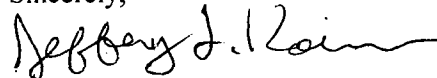
REQUEST FOR ADDITIONAL INFORMATION

- b. For each of the last 5 years for the refinery season, identify the amount of steam generated from firing bagasse and oil and corresponding heat input rates for each fuel.
3. Table 5-1 identifies previous NO_x BACT determinations for biomass-fired industrial and commercial boilers. Please identify which projects are for new units and which are for modified units.
4. Section 5.2.6 of the application identifies that Boiler 7 currently controls NO_x emissions with a combination of good combustion practices, overfire air, low excess air, and low nitrogen content of the fuel. Additional controls are rejected as BACT.
 - a. What NO_x emissions standard is proposed as BACT?
 - b. What is the averaging period and method proposed to demonstrate compliance?
 - c. What parametric monitoring is proposed to ensure that good combustion practices are being followed? Describe the methods used to ensure low excess air and that the overfire air system is adjusted to reduce NO_x emissions.
5. Page 3-13 includes a discussion of the applicable requirements in NSPS Subpart Db for Boiler 7. The application states that the requirement to install a COMS no longer applies because the opacity limit for fuel oil firing no longer applies as a result of the low sulfur content and fuel restrictions. However, wood is specifically identified as a fuel under the standards for particulate matter, which includes opacity. The Please comment.
6. The cost effectiveness of the SNCR system was based on NO_x emissions generated only from the maximum amount of wood proposed. Is this because wood firing will be conducted alone and only during the refinery season and startup?
7. In May, the Department authorized a temporary trial burn of 100% wood chips in Boiler 7 to conduct stack testing to determine NO_x emissions and gather operational data. Please provide an update on the status of the trial burn and the preliminary results when available. Also, provide a copy of the test report as soon as practicable.
8. NO_x is an ozone precursor and any net increase of 100 tons per year requires an ambient impact analysis. The predicted NO_x increase for this project is greater than 100 tons per year. Please provide this analysis.
9. At this time, the Department is unable to accept the use of the "VISTAS" version of CALPUFF and CALMET. Please revise the air quality analysis for Class I impacts using the regulatory version of CALMET and CALPUFF. Presently the regulatory versions are CALMET 5.53a and CALPUFF 5.711a.

The Department will resume processing your application after receipt of the requested information. Rule 62-4.050(3), F.A.C. requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature. For any material changes to the application, please include a new certification statement by the authorized representative or responsible official. You are reminded that Rule 62-4.055(1), F.A.C. requires applicants to respond to requests for information within 90 days or to provide a written request for an additional period of time to submit the information.

If you have any questions regarding this matter, please contact the project engineer, Jeff Koerner, at 850/921-9536.

Sincerely,



Jeffery F. Koerner, Administrator
Air Permitting North Section

REQUEST FOR ADDITIONAL INFORMATION

This letter was sent by electronic mail with received receipt requested to the following people:

Mr. Neil Smith, U.S. Sugar (nsmith@ussugar.com)
Mr. Peter Briggs, U.S. Sugar (pbriggs@ussugar.com)
Mr. David Buff, Golder Associates (dbuff@golder.com)
Mr. Ajaya Satyal, SD Office (ajaya.satyal@dep.state.fl.us)
Ms. Kathleen Forney (forney.kathleen@epa.gov)
Mr. Jim Little, EPA Region 4 (little.james@epa.gov)
Mr. Dee Morse, National Park Service (Dee_Morse@nps.gov)

JFK