

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ECEVED

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ATLANTA, GEORGIA 30303-8960

SEP 2 0 2005

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BUREAU OF AIR REGULATION

4APT-ATMB

Mr. Michael Cooke Director Division of Air Resource Management Florida Department of Environmental Protection Mail Station 5500

RE

DIVISION OF AIR RESOURCE MANAGEMENT

SEP 23 2005

RECEIMAN

Dear Mr. Cooke:

2600 Blair Stone Road

Tallahassee, Florida 32399-2400

We have received a request from Mr. Jeff Koerner for a determination regarding 40 CFR Part 63, Subpart DDDDD - "National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Industrial, Commercial, and Institutional Boilers and Process Heaters." The request relates to Boiler No. 8 at the U.S. Sugar Corporation facility in Clewiston, Florida. The boiler is considered a new, large solid fuel-fired industrial boiler under Subpart DDDDD, and emission controls used for the boiler include an electrostatic precipitator (ESP) which is preceded by two wet scrubbers. U.S. Sugar has requested a waiver from all Subpart DDDDD monitoring requirements for the two wet scrubbers, since they are not needed to comply with the emission limit for HCl. Information was submitted by U.S. Sugar on June 8, 2005, to demonstrate that the emission limit for HCl will be met without controls, based on emission testing which was conducted prior to the scrubbers. Based on our review, we have determined that a waiver from the pH monitoring requirement under Subpart DDDDD is appropriate. However, since the wet scrubbers are also used to control particulate matter emissions, scrubber pressure drop and liquid flow rate must be monitored as required by Subpart DDDDD.

As indicated in the U.S. Sugar request, Boiler No. 8 has a heat input of 936 mmBtu/hr. The primary fuel for the boiler is bagasse, and No. 2 fuel oil is used as a supplemental fuel. Air pollution controls used for the boiler consist of the wet scrubbers (two wet cyclone collectors), followed by an ESP to control particulate matter emissions, and a selective non-catalytic reduction system to control NO_x emissions. The two wet cyclone collectors are located in parallel before the induced draft fan and ESP. The wet cyclone collectors, also referred to as wet sand separators, prevent excessive wear on the fan by abrasive sand particles, and they will also prevent overloading of the ESP. The wet cyclone collectors are expected to remove approximately 50 percent of the inlet particulate matter. Water is taken from a large on-site pond to supply the wet scrubbers, and the water is then returned to the pond. There is no treatment of the water before or after its use in the scrubbers, and data indicates the pH remains at a constant level of approximately 7.5 after the scrubbers.

Information submitted by U.S. Sugar on June 8, 2005, indicates that uncontrolled HCl emissions at the inlet to the wet scrubbers have been determined to average 0.0043 lb/mmBtu. Therefore, the wet scrubbers are not necessary to comply with the Subpart DDDDD HCl emission limit of 0.02 lb/mmBtu. Compliance with the HCl limit without the use of scrubbers is attributed to the low levels of chlorine in the bagasse fuel, the alkaline nature of fly ash from bagasse combustion, and the resulting inherent acid gas removal associated with bagasse-fired boilers. U.S. Sugar has requested a waiver from all wet scrubber monitoring requirements under Subpart DDDDD (i.e., scrubber effluent pH, scrubber pressure drop, and liquid flow rate). While we agree that pH monitoring may be waived, the requirement to monitor scrubber pressure drop and liquid flow rate can not be waived since these parameters are also used to monitor compliance with the particulate matter emission limit in the standard. As previously indicated in this letter, the wet scrubbers are expected to remove approximately 50 percent of the inlet particulate matter and will prevent excessive wear on the induced draft fan. The scrubbers are also described as being used to prevent overloading of the ESP. As required by Subpart DDDDD, operating limits will need to be established for the wet scrubbers as well as the ESP, to ensure proper operation of the control equipment.

If there are any questions regarding this letter, please contact Mr. Joydeb Majumder of the EPA Region 4 staff at (404) 562-9121.

Sincerely,

Beverly H. Banister

Director

Air, Pesticides & Toxics Management Division

cc: Jeff Koerner

Florida Department of Environmental Protection



Department of Environmental Protection

Jeb Bush Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Colleen M. Castille Secretary

November 11, 2005 (Emailed)

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. William A. Raiola, V.P. of Sugar Processing Operations United States Sugar Corporation 111 Ponce DeLeon Avenue Clewiston, FL 33440

Re: Request for Additional Information

U.S. Sugar Corporation – Clewiston Sugar Mill and Refinery Project No. 0510003-024-AC (PSD-FL-333B)
Revision to Incorporate NESHAP Subpart DDDDD Provisions

Dear Mr. Raiola:

The purpose of this letter is to update you on the status of your application for the revision to the Boiler 8 PSD air construction permit. To date, the revisions include the following: incorporate NEHSAP Subpart DDDDD requirements for industrial boilers (with alternate pH monitoring procedures); revise the CO standard; add wood chips as an authorized fuel; and revise the ammonia slip standard. On 11/02/05, we received the stack test report conducted while firing wood chips. The application is currently 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. Please provide information from the SNCR vendor describing the final design of this system related to ammonia slip levels. Discuss any unanticipated or complicating factors for maintaining ammonia slip levels below 20 ppmvd @ 7% oxygen.
- 2. For varying load levels between 50% to 100%, identify predicted ammonia slip levels (@ 7% oxygen) for bagasse/oil firing, bagasse firing, bagasse/wood firing, and wood firing alone (if a possible operating scenario).

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 provide a written request for an additional period of time to submit the information.

If you have any questions regarding this matter, please call me at 850/921-9536.

Sincerely

Jeffery F. Koerner, P.E.

thoug J.

Air Permitting North Program

cc: Mr. Peter Briggs, U.S. Sugar

Mr. Don Griffin, U.S. Sugar

Mr. David Buff, Golder Associates Inc.

Mr. Ron Blackburn, SD Office

Ms. Kathleen Forney, EPA Region 4

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