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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
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ATLANTA, GEORGIA 30303-8960

February 1, 2008

Mr. Joseph Kahn, Director
Division of Air Resources Management
Florida Department of Environmental Protection
Mail Station 5500
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Dear Mr. Kahn:

We have received a request from U.S. Sugar Corporation for an alternative opacity monitoring procedure for Boiler No. 7 at the company's Clewiston Sugar Mill and Refinery, located in Clewiston, Florida. The boiler is subject to New Source Performance Standards (NSPS) Subpart Db - "Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units." As an alternative to the use of a continuous opacity monitoring system (COMS) as required by Section 60.48b(a), U.S. Sugar proposes a procedure for monitoring the total power input to the electrostatic precipitator (ESP). Based on a review of the U.S. Sugar proposal, the Environmental Protection Agency (EPA) Region 4 approves the monitoring of total power input to the ESP as an alternative to a COMS for Boiler No. 7. The requirements of an acceptable alternative monitoring procedure are discussed in this letter.

Boiler No. 7 has a heat input capacity of 738 mmBtu/hr and currently fires bagasse as a primary fuel. No. 2 fuel oil is used during startup and as a supplemental fuel, with an annual capacity factor of ten percent or less. U.S. Sugar proposes to fire wood chips, with an annual capacity factor of 25 percent or less. No physical changes are needed to enable the boiler to use wood chips as fuel. Emissions from Boiler No. 7 are controlled by a wet sand separator followed by an ESP. The boiler is subject to the Subpart Db standard for opacity while firing wood chips and No. 2 fuel oil, and Subpart Db requires a COMS to demonstrate compliance with the opacity standard. Although the State of Florida has previously indicated that Boiler No. 7 is subject to a Subpart Db particulate matter (PM) emission limit at Section 60.43b(h), further review indicates that the PM emission limits of Subpart Db do not apply to the boiler. The boiler was constructed prior to February 28, 2005, and is therefore not subject to Section 60.43b(h). Since the maximum heat input capacity of the boiler is greater than 250 mmBtu/hr and the annual capacity factor for wood chips will be restricted to 25 percent or less, the PM emission limits in

Section 60.43b(c) do not apply. Although the Subpart Db emission limits for PM are not applicable, the Prevention of Significant Deterioration preconstruction permit issued for Boiler No. 7 over ten years ago requires compliance with a Best Available Control Technology PM emission limit of 0.03 lb/mmBtu.

Due to the high moisture content of the bagasse and wood chips and the moisture from the wet sand separator, U.S. Sugar indicates that water droplets in the flue gas will interfere with reliable opacity measurements when using a COMS. Section 60.13(i)(1) allows EPA to approve alternative monitoring procedures when liquid water interference does not provide accurate measurements with a continuous monitoring system, and U.S. Sugar proposes an alternative based on monitoring of the total power input to the ESP. To justify the alternative monitoring proposal, U.S. Sugar has referenced the provisions of 40 CFR Part 63 Subpart DDDDD – "National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters" (promulgated on September 13, 2004). When wet control systems are used in combination with an ESP, Subpart DDDDD allows a parametric monitoring procedure based on monitoring the total power input to an ESP as an alternative to the use of a COMS.

EPA Region 4 approves the use of the Subpart DDDDD procedure for monitoring the total power input to the ESP for Boiler No. 7, as an alternative to a COMS. This approval includes a requirement for U.S. Sugar to demonstrate continuous compliance by following the provisions in Table 8 of Subpart DDDDD. Table 8 of Subpart DDDDD requires a facility to continuously collect secondary current and voltage or total power input monitoring system data, reduce the data to 3-hour block averages, and maintain the 3-hour average values at or above the limits established during the performance test.

The U.S. Sugar alternative monitoring proposal references provisions of the Compliance Assurance Monitoring (CAM) rule at 40 CFR Part 64 to justify the use of an 8-hour average total power input to demonstrate continuous compliance. However, the CAM rule provisions do not justify a relaxation of the parametric monitoring requirements specified in 40 CFR Part 63 Subpart DDDDD or a relaxation of the requirements in the alternative monitoring procedure for Boiler No. 7 at U.S. Sugar. The CAM rule at 40 CFR Part 64.2(b)(1)(i) indicates that requirements of that rule do not apply to emission limitations or standards proposed by the Administrator after November 15, 1990, pursuant to Section 111 or 112 of the Clean Air Act. The CAM rule at Section 64.10(a)(1) further indicates that the rule shall not be used to justify the approval of monitoring less stringent than the monitoring that is required under separate legal authority and is not intended to establish minimum requirements for determining the monitoring to be imposed under separate authority. The use of a 3-hour average total power input to demonstrate continuous compliance, as required in the ESP monitoring provisions developed for

40 CFR Part 63 Subpart DDDDD, is appropriate for the U.S. Sugar alternative monitoring plan for Boiler No. 7. The U.S. Sugar proposal to use an 8-hour average total power input to demonstrate continuous compliance under NSPS Subpart Db is not justified.

If there are any questions regarding this letter, please contact Mr. Keith Goff of the Region 4 staff at (404)562-9137.

Sincerely,

Beverly H. Banister
Director
Air, Pesticides, and Toxics
Management Division

cc: Jeffery Koerner, Florida Department of Environmental Protection
David A. Buff, Golder Associates Inc.