



# Department of Environmental Protection

Jeb Bush  
Governor

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

Colleen M. Castille  
Secretary

August 2, 2006

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Neil Smith, Vice President of Sugar Processing Operations  
U.S. Sugar Corporation  
Clewiston Sugar Mill and Refinery  
111 Ponce DeLeon Avenue  
Clewiston, Florida 33440

Re: **Request for Additional Information**  
U.S. Sugar Corporation – Clewiston Sugar Mill and Refinery  
Project No. 0510003-038-AC (PSD-FL-346)  
Application for Revision to New White Sugar Dryer

Dear Mr. Smith:

On July 3, 2006, the Department received your application requesting a revision to the particulate matter emissions standard for the new white sugar dryer at the Clewiston Mill. On July 12, 2006, the Department requested additional information via email (attached) regarding this project. The purpose of this letter is to update you on the status of your application for a revised air construction permit.

Based on my site visit conducted on July 24, 2006 and subsequent conversations with our South District Office, U.S. Sugar is pursuing several options to establish operation of the particulate matter control system consistent with the original design. For example, U.S. Sugar is in the process of removing the blanking plate at the scrubber inlet. This should allow the atomized water cloud to form that is needed for proper operation of the scrubber and may prevent the carryover of water droplets. Additional testing will be performed to document any improvements. Other options may also be tried and additional emissions tests conducted. Such corrective actions may result in a demonstration of compliance with the original emissions standard.

At this time your application remains incomplete. In order to continue processing your application, the Department will need the additional information requested in the July 12<sup>th</sup> email as well as the following:

1. A description of the corrective actions taken and the results;
2. A summary of all emissions tests conducted, including preliminary tests;
3. A description and schematic of the final emissions unit and controls system noting changes to the original design and installed equipment; and
4. A summary of the effectiveness of the particulate matter control system (as corrected) and the emissions.

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.

*"More Protection. Less Process"*

*Printed on recycled paper.*

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.

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  
Mr. Jim Little, EPA Region 4

**Koerner, Jeff**

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**From:** Koerner, Jeff  
**Sent:** Wednesday, July 12, 2006 4:37 PM  
**To:** 'Buff, Dave'  
**Cc:** Nelson, Deborah; Don Griffin  
**Subject:** White Sugar Dryer - Request for Additional Information & Modeling

David Buff, P.E.  
Golder Associates Inc.  
6241 NW 23rd Street, Suite 500  
Gainesville, FL 32653  
(352) 336-5600

Dave,

We received the application for the white sugar dryer on July 3rd. I'll be out all next week (17th - 21st) and wanted to get you my initial request for additional information. I'll be meeting with Don Griffin and Peter Briggs on July 24th at Clewiston to look at the facility and see the dryer and refinery. Here's my initial questions.

1. A modeling analyses was not provided with the application. Debbie Nelson was the meteorologist on the original project and will be working on this revision as well. She is reviewing the original project to see what was provided and what was "exempted" by rule. She is also reviewing our current rules, which were revised in February of this year. She will review and let you know what modeling analyses must be provided for this project.
2. Page 2-2 of the application indicates that 25% of the dryer exhaust bypasses the cyclones directly to the wet scrubber. Please describe how the bypass is introduced into the scrubber and are the flows well mixed? Can another cyclone be added prior to the wet scrubber to avoid the bypass? What would be the additional capital and annualized costs?
3. The original application indicated that the scrubber exhaust would be horizontally out of the side of the building. The recent application indicates that the scrubber exhaust is vertical (Page 2-3). Is the scrubber exhaust horizontal or vertical? Was the exhaust stream tested for cyclonic flow?
4. The second paragraph on page 4-6 of the application indicates that the "... an outlet dust loading of 0.005 gr/dscf (proposed limit for permitting purposes is 0.00729 gr/dscf)." Please explain this statement.
5. Please describe any other engineering solutions that are being pursued.

After my site visit, I may have additional questions.

Sincerely,

Jeff Koerner, BAR - Air Permitting North  
Florida Department of Environmental Protection  
850/921-9536

**Koerner, Jeff**

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**From:** Little.James@epamail.epa.gov  
**Sent:** Wednesday, August 02, 2006 3:31 PM  
**To:** Koerner, Jeff  
**Subject:** Re: US Sugar - White Sugar Dryer

Thanks.

Jim

"Koerner, Jeff"  
<Jeff.Koerner@dep.state.fl.us>

08/01/2006 03:29  
PM

James Little/R4/USEPA/US@EPA  
To  
cc  
Subject  
US Sugar - White Sugar Dryer

Jim,

I promised you a follow up on this issue.

I spoke with our District Office regarding the sugar dryer. They are preparing a Consent Order for the failed stack test which requires payment of a penalty and corrective actions to resolve the scrubber problem. In turn, US Sugar gets another 6 months to operate the scrubber, try various options, and perform emissions testing to document improvements. We're not sure they will get to the original emissions limit, but they are seeking an engineering solution. I believe the first thing they will try is to remove a blanking plate (shroud) that was installed at the scrubber inlet to increase the exhaust gas velocity. Their consultant (former VP of the company that manufactured the scrubber) indicates that the blanking plate is preventing the scrubber from forming the atomized water cloud needed for proper operation. Instead, the cloud is appearing intermittently and water is building up near the blanking plate and then being carried over in the exhaust in large water droplets. They will likely remove the shroud and retest to see what this does.

With regard to the application, I plan to send them a request for additional information regarding emissions, corrective actions, and additional testing. If they've exhausted their options and made improvements we might consider a modified emissions standard based on the additional testing. We hope that they'll be able to fix the scrubber problem. We're going to make them at least try ...

Thanks!

Jeff Koerner, BAR - Air Permitting North  
Florida Department of Environmental Protection  
850/921-9536

## Koerner, Jeff

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**From:** Koerner, Jeff  
**Sent:** Tuesday, August 01, 2006 3:30 PM  
**To:** 'Little.James@epamail.epa.gov'  
**Subject:** US Sugar - White Sugar Dryer

Jim,

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I spoke with our District Office regarding the sugar dryer. They are preparing a Consent Order for the failed stack test which requires payment of a penalty and corrective actions to resolve the scrubber problem. In turn, US Sugar gets another 6 months to operate the scrubber, try various options, and perform emissions testing to document improvements. We're not sure they will get to the original emissions limit, but they are seeking an engineering solution. I believe the first thing they will try is to remove a blanking plate (shroud) that was installed at the scrubber inlet to increase the exhaust gas velocity. Their consultant (former VP of the company that manufactured the scrubber) indicates that the blanking plate is preventing the scrubber from forming the atomized water cloud needed for proper operation. Instead, the cloud is appearing intermittently and water is building up near the blanking plate and then being carried over in the exhaust in large water droplets. They will likely remove the shroud and retest to see what this does.

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