Memorandum

Florida Department of Environmental Protection

TO:

Trina Vielhauer, Bureau of Air Regulation

FROM:

Jeff Koerner, Air Permitting North

DATE:

May 7, 2007

SUBJECT:

Exemption from Requirement to Obtain an Air Construction Permit

U.S. Sugar Corporation, Clewiston Sugar Mill and Refinery

Temporary Trial Burn of Wood Chips in Boiler 7 for NO_X Testing

On May 1, 2007, U.S. Sugar submitted an application requesting authorization to conduct NO_X emissions testing while firing 100% wood chips. The trial burn would likely be conducted over a two week period in May or June. Due to the lesser steam demands of the sugar refinery, Boiler 7 would operate at approximately 85% of the permitted capacity of 738 MMBtu/hour (24-hour average). Firing at this capacity for 24 hours per day for two weeks is approximately 23,000 tons of wood chips.

The purpose of the trial burn is to gather operational information and NO_X emissions data from firing wood chips. This information may be used to support a future request to permanently fire wood chips as a supplemental and alternate fuel. The following table shows the estimated emissions from firing approximately 23,000 tons of wood chips. As shown, the estimated emissions are less than the PSD significant emissions rates. Assuming that wood chips will offset bagasse, the difference in emissions for this amount of wood chips is very small.

I recommend your approval and signature.

Pollutant	Emissions, Tons/Year			
	Wood	Bagasse	Difference	PSD SER
СО	33.7	43.4	- 9.7	100
NO_X	32.7	21.4	+ 11.3	40
PM/PM ₁₀	3.2/3.2*	3.2/3.2*	0/0	15/25
SO_2	4.2	1.5	+ 2.7	40
VOC	3.7	2.3	+ 1.4	40

^{*} Particulate matter is controlled by a combination of cyclones and an electrostatic precipitator. Wood firing is expected to generate less particulate loading than bagasse firing, so emissions should not increase.

Attachments

0510003-043-AC



Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

May 8, 2007

SENT BY ELECTRONIC 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: United States Sugar Corporation, Clewiston Sugar Mill and Refinery

Temporary Trial Burn of Wood Chips in Boiler 7

Exemption from the Requirement to Obtain an Air Construction Permit

Dear Mr. Smith:

On May 1, 2007, we received an application requesting authorization for a temporary trial burn to fire 100% wood chips. Previous trials have been conducted on Boiler 7 with a mixed fuel of bagasse and wood chips. The purpose of this trial is to gather operational information and NO_X emissions data. The information is needed to support a possible future request to permanently fire wood chips as an alternate or supplemental fuel.

Determination: The Department approves your request as conditioned by the provisions attached to this letter. Pursuant to Rule 62.4.040(1)(b), F.A.C., the Department exempts this temporary project from the requirement to obtain an air construction permit. This determination may be revoked if the proposed activity is substantially modified or the basis for the exemption is determined to be materially incorrect. A copy of this letter shall be maintained at the site of the proposed activity. This permitting decision is made pursuant to Chapter 403, Florida Statutes (F.S.).

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, F.S., and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making a determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida 32301. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within 21 days of receipt of this Written Notice of Exemption. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within 21 days of publication of a Public Notice or within 21 days of receipt of this Written Notice of Exemption, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice

EXEMPTION FROM AIR CONSTRUCTION PERMIT

of agency action may file a petition within 21 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Written Notice of Exemption. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available in this proceeding.

Effective Date: This permitting decision is final and effective on the date filed with the clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition pursuant to Rule 62-110.106, F.A.C., and the petition conforms to the content requirements of Rules 28-106.201 and 28-106.301, F.A.C. Upon timely filing of a petition or a request for extension of time, this action will not be effective until further order of the Department.

Appeal: Any party to this permitting decision (order) has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

Trina Vielhauer, Chief

Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Written Notice of Intent of Exemption was sent by electronic mail with received receipt requested before the close of business on 5/8/07 to the persons listed below.

Mr. Neil Smith, U.S. Sugar (nsmith@ussugar.com)

Mr. Peter Briggs, U.S. Sugar (pbriggs@ussugar.com)

Mr. David Buff, Golder Associates (dave buff@golder.com)

Mr. Audrey Wright, SD Office (wright a@dep.state.fl.us)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

PROVISIONS FOR EXEMPTION FROM AIR CONSTRUCTION PERMIT

Subject to the following provisions and restrictions, the U.S. Sugar Corporation (U.S. Sugar) is authorized to fire wood chips in existing Boiler 7 on a temporary basis to gather operational information and emissions data subject to the following conditions.

- 1. U.S Sugar is temporarily authorized to conduct a trial burn of wood chips in Boiler 7 for purposes of gathering operational information and NO_X emissions data. Wood chips shall only be fired to displace bagasse and distillate oil for energy recovery in support of the sugar mill and refinery operations. Wood chips shall not be fired solely for the purpose of disposal.
- 2. The trial burn period is restricted to 30 consecutive calendar days. The trial burn period begins once wood chips are first fired in Boiler 7. U.S. Sugar shall complete the trial burn on or before October 1, 2007.
- 3. No more than 23,000 tons of wood chips shall be fired during the trial period. U.S. Sugar shall monitor and record the amount of wood chips in tons delivered to the facility and fired in Boiler 7.
- 4. Wood chips shall consist of clean dry wood and vegetative materials and shall be substantially free of plastics, rubber, glass, painted wood, chemically treated wood, and non-combustible materials. The firing of any household garbage, hazardous wastes, or toxic materials is prohibited.
- 5. During the trial burn period, at least three grab samples of wood chips shall be taken. Each grab sample shall be taken prior to mixing with bagasse, be approximately one pound, and be stored in sealable plastic bags. The grab samples shall be combined to form a "composite sample", which shall be produced by mixing the individual grab samples into a homogeneous mixture and then cutting out a single representative sample. In accordance with Methods 3050/6010 (EPA Method SW-846) the composite sample shall be analyzed for copper, chromium, and arsenic and reported as ppmw, dry. In addition, the samples shall be analyzed for the fuel heating value (modified ASTM D3286; Btu/lb, dry), and moisture content (modified ASTM D3173; percent by weight). Results of the analysis shall be included with the emissions test report.
- 6. With the exceptions of particulate matter and opacity, the emissions standards for carbonaceous fuel firing shall not apply when firing wood during the trial burn period. Such standards were established in Permit No. PSD-FL-208 and were based on the firing of bagasse without add-on controls. The standards for particulate matter and opacity apply because Boiler 7 includes cyclones and an electrostatic precipitator to control particulate matter emissions. However, available information indicates that particulate matter emissions will be lower when firing wood so no additional particulate matter testing is required. U.S. Sugar shall comply with all other current permit conditions. If Boiler 7 is unable to comply with a permit condition as a result of firing wood chips, then the firing of wood chips shall be discontinued or the boiler shall be shut down. {Permitting Note: Except for NO_X emissions, available information indicates that emissions of carbon monoxide, particulate matter, sulfur dioxide, and volatile organic compounds from the firing of wood will comply with the current standards applicable to bagasse. NO_X emissions from firing 100% wood are expected to be higher than the current emissions standard of 0.25 lb/MMBtu for bagasse, possibly 0.31 lb/MMBtu.}
- 7. During the trial burn period, Boiler 7 shall be tested for NO_X emissions when firing 100% wood chips. At least six, 1-hour test runs shall be conducted. For each test run, U.S. Sugar shall monitor and record the total amount of wood chips fired and the following parameters at 15-minute intervals: steam production, steam temperature, and steam pressure.
- 8. All air pollution control equipment shall be used to the maximum extent possible. Fugitive particulate matter shall be controlled by confinement and/or water spray as necessary.
- 9. Within 45 days of completing the emissions tests, U.S. Sugar shall submit a report to the Bureau of Air Regulation with the following information: a summary of the wood chip test procedure; the tons of wood chips fired; the estimated heat input from firing wood chips (MMBtu); the tested NOx emissions rates (lb/MMBtu and lb/hour); and the wood chip analyses.

From:

Harvey, Mary

Sent:

Tuesday, May 08, 2007 2:35 PM

To:

'Mr. Neil Smith, U.S. Sugar'; 'Mr. Peter Briggs, U.S. Sugar'; 'Mr. David Buff, Golder

Associates'; 'Mr. Audrey Wright, SD Office'

Cc:

Koerner, Jeff; Adams, Patty; Gibson, Victoria

Subject:

USSC - Facility #0510003-043-AC

Attachments: Exemption LTR-USSC- Neil Smith - Facility #0510003-043-AC.pdf

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: http://www.adobe.com/products/acrobat/readstep.html.

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Thank you,

DEP. Bureau of Air Regulation

From:

Harvey, Mary

Sent:

Tuesday, May 08, 2007 3:24 PM

To:

Adams, Patty

Subject:

FW: USSC - Facility #0510003-043-AC

Attachments: Exemption LTR-USSC- Neil Smith - Facility #0510003-043-AC.pdf

From: Koerner, Jeff

Sent: Tuesday, May 08, 2007 3:19 PM

To: Harvey, Mary

Subject: FW: USSC - Facility #0510003-043-AC

Mary,

I forwarded a copy to Audrey Wright at the SD Office because I may have given you a bad e-mail address.

Here is her reply stating she received it.

Thanks!

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

From: Wright, Audrey

Sent: Tuesday, May 08, 2007 3:16 PM

To: Koerner, Jeff

Cc: Wolfe, Janice; Endsley, Carter; Culliver, Sherrill **Subject:** FW: USSC - Facility #0510003-043-AC

Received.

-----Original Message-----From: Koerner, Jeff

Sent: Tuesday, May 08, 2007 2:46 PM

To: Wright, Audrey

Subject: FW: USSC - Facility #0510003-043-AC

From: Harvey, Mary

Sent: Tuesday, May 08, 2007 2:35 PM

To: 'Mr. Neil Smith, U.S. Sugar'; 'Mr. Peter Briggs, U.S. Sugar'; 'Mr. David Buff, Golder Associates';

'Mr. Audrey Wright, SD Office'

Cc: Koerner, Jeff; Adams, Patty; Gibson, Victoria **Subject:** USSC - Facility #0510003-043-AC

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Thank you,

DEP, Bureau of Air Regulation

From:

Harvey, Mary

Sent:

To:

Subject:

Tuesday, May 08, 2007 3:00 PM Adams, Patty FW: USSC - Facility #0510003-043-AC

From: Peter Briggs [mailto:pbriggs@ussugar.com]

Sent: Tuesday, May 08, 2007 2:56 PM

To: Harvey, Mary

Subject: Read: USSC - Facility #0510003-043-AC

Your message

To: pbriggs@ussugar.com

Subject:

was read on 5/8/2007 2:56 PM.

From: Harvey, Mary

Sent: Tuesday, May 08, 2007 3:00 PM

To: Adams, Patty

Subject: FW: USSC - Facility #0510003-043-AC

From: Peter Briggs [mailto:pbriggs@ussugar.com]

Sent: Tuesday, May 08, 2007 2:57 PM

To: Harvey, Mary

Subject: RE: USSC - Facility #0510003-043-AC

From: Harvey, Mary [mailto:Mary.Harvey@dep.state.fl.us]

Sent: Tuesday, May 08, 2007 2:35 PM

To: Neil Smith; Peter Briggs; Mr. David Buff, Golder Associates; Mr. Audrey Wright, SD Office

Cc: Koerner, Jeff; Adams, Patty; Gibson, Victoria **Subject:** USSC - Facility #0510003-043-AC

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Thank you,

DEP, Bureau of Air Regulation

From:

Sent:

To:

Subject:

Harvey, Mary Tuesday, May 08, 2007 3:00 PM Adams, Patty FW: USSC - Facility #0510003-043-AC

From: Peter Briggs [mailto:pbriggs@ussugar.com]

Sent: Tuesday, May 08, 2007 2:56 PM

To: Harvey, Mary

Subject: Read: USSC - Facility #0510003-043-AC

Your message

To: pbriggs@ussugar.com

Subject:

was read on 5/8/2007 2:56 PM.

From:

Harvey, Mary

Sent:

Tuesday, May 08, 2007 3:00 PM

To:

Adams, Patty

Subject: FW: USSC - Facility #0510003-043-AC

From: Peter Briggs [mailto:pbriggs@ussugar.com]

Sent: Tuesday, May 08, 2007 2:57 PM

To: Harvey, Mary

Subject: RE: USSC - Facility #0510003-043-AC

From: Harvey, Mary [mailto:Mary.Harvey@dep.state.fl.us]

Sent: Tuesday, May 08, 2007 2:35 PM

To: Neil Smith; Peter Briggs; Mr. David Buff, Golder Associates; Mr. Audrey Wright, SD Office

Cc: Koerner, Jeff; Adams, Patty; Gibson, Victoria **Subject:** USSC - Facility #0510003-043-AC

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Thank you,

DEP, Bureau of Air Regulation

From:

Sent:

Harvey, Mary Tuesday, May 08, 2007 2:39 PM Adams, Patty

To:

Subject:

FW: USSC - Facility #0510003-043-AC

From: Lisa Pickron [mailto:lpickron@ussugar.com]

Sent: Tuesday, May 08, 2007 2:38 PM

To: Harvey, Mary

Subject: Read: USSC - Facility #0510003-043-AC

Your message -

To: lpickron@ussugar.com

Subject:

was read on 5/8/2007 2:38 PM.