

**NESHAPS SUBPART DDDDD  
HEALTH-BASED COMPLIANCE  
ALTERNATIVE DEMONSTRATION**

***BUCKEYE FLORIDA, LIMITED PARTNERSHIP  
FOLEY MILL  
TAYLOR COUNTY, FLORIDA***

**Prepared For:**

**Buckeye Florida, Limited Partnership  
One Buckeye Drive  
Perry, FL 32348**

**Prepared By:**

**Golder Associates Inc.  
6241 NW 23rd Street, Suite 500  
Gainesville, Florida 32653-1500**

**September 2006**

**0637560**

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JAN 22 2007

NORTHEAST DISTRICT  
DEP-JACKSONVILLE

**Golder Associates Inc.**

6241 NW 23rd Street, Suite 500  
Gainesville, FL USA 32653  
Telephone (352) 336-5600  
Fax (352) 336-6603  
www.golder.com



January 16, 2007

063-7560

Florida Department of Environmental Protection  
Northeast District  
7825 Baymeadows Way, Suite B200  
Jacksonville, FL 32256-7590

RECEIVED

JAN 31 2007

Attention: Mr. Christopher L. Kirts, P.E., District Air Program Administrator

BUREAU OF AIR REGULATION

**RE: BUCKEYE FLORIDA, LIMITED PARTNERSHIP  
FACILITY ID: 1230001  
HBCA TITLE V PERMIT REVISION APPLICATION  
REQUEST FOR ADDITIONAL INFORMATION**

Dear Mr. Kirts:

Buckeye Florida Limited Partnership (Buckeye) has received the Florida Department of Environmental Protection's (FDEP) request for additional information (RAI) dated November 13, 2006 regarding the health-based compliance alternative (HBCA) Title V permit revision application. Each of the FDEP's requests is answered below, in the same order as they appear in the RAI letter.

**Comment 1. Please describe the location where the samples of the solid fuel were collected for the fuel analysis and describe the fuel conveyor system. Please also provide a flow diagram of the fuel conveyor system.**

**Response:** Appendix A of Title 40, Part 63 of the Code of Federal Regulations (40 CFR 63), Subpart DDDDD, allows emissions tests or fuel analyses to be conducted to determine hazardous air pollutant (HAP) emissions from each affected source. In addition, Subpart DDDDD allows for fuel samples to be obtained from a belt (or screw) feeder or from a fuel pile or truck [§63.7521(c)]. Since there was some difficulty in obtaining fuel samples from the fuel conveyor system, the solid fuel samples were collected from the bark/wood storage pile. The location of the bark/wood storage pile is approximately 50 meters southeast of the Nos. 1 and 2 Bark Boiler stack. Because the samples were obtained from the storage pile, a description and flow diagram of the fuel conveyor system are not necessary.

**Comment 2. In Figure 4-2 Receptor Grid Locations, please indicate what are the sensitive receptors (for example, school, daycare, senior community, hospital).**

**Response:** The area covered by the receptor grid in Figure 4-2, Receptor Grid Locations, does not contain any sensitive areas such as schools, daycares, hospitals, or senior communities. An additional figure, Figure A, Receptor Grid Locations and Sensitive Areas, has been developed to show the proximity of the receptor grid locations to any sensitive areas. The nearest sensitive area is Taylor Technical Institute, which is 1,850 meters west of the nearest receptor. Figure A is included with this response.

**Comment 3. The mill has proposed a manganese emissions limit of 6.1E-03 lb/MMBtu as a federally enforceable condition in the Title V permit for both the Nos. 1 and 2 Bark Boilers. Please realize that such permit conditions and limitations will more than likely require compliance demonstrations. Please state how the mill intends to demonstrate compliance with the proposed manganese emission limits.**

**Response:** Buckeye intends to demonstrate compliance with the 6.1E-03 pounds per million British thermal units (lb/MMBtu) manganese limit by conducting bark/wood fuel analysis. Samples will be collected and composited according to the Boiler Maximum Available Control Technology (MACT) requirements in Table 6 of 40 CFR 63, Subpart DDDDD. The heat content, moisture content, and total selected metals (TSM) concentrations for each composited fuel sample will be determined using the MACT methods.

Compliance with the manganese emission limit will be demonstrated with another round of fuel sampling to be conducted within 180 days after the Boiler MACT compliance date of September 13, 2007. A site-specific test plan will be developed and submitted at least 60 days prior to the fuel sampling, per 40 CFR 63.7521(b). This fuel sampling will also be used to demonstrate compliance with the Boiler MACT TSM limit of 0.0003 lb/MMBtu for existing solid-fuel boilers. Manganese measured in the fuel will be excluded from the TSM calculation, pending approval of the HBCA demonstration. Once compliance is demonstrated, fuel sampling is only required once every 5 years or when a new type of fuel is burned [§63.7515(f)].

**Comment 4.** The mill has proposed the heat input rates to the two boilers as federally enforceable conditions in the Title V Permit. However, it is stated that the averaging time for these heat input rates is 24-hours. Please note that the averaging times in the current Title V Permit are not based on 24-hours. Please explain this statement.

**Response:** The stated 24-hour averaging time for the heat input rates is based on the HBCA requirement that annual impacts be determined for the site-specific demonstration. Therefore, the 24-hour averaging time is appropriate for predicting annual air impacts. The Title V permit does not specify an averaging time for the heat input rates. The 24-hour averaging time shown in Table 5-1 of the original HBCA application is reflective of the HBCA requirement. However, no change in the current Title V permit is necessary since the permit already limits the heat input to 300 million British thermal units per hour (MMBtu/hr).

**Comment 5.** The stack information presented in Table 2-2 reflects the common stack shared by the Nos. 1 and 2 Power Boilers, and Nos. 1 and 2 Bark Boilers. Given that the Nos. 1 and 2 Power Boilers are not stated 40 CFR 60 Subpart DDDDD sources, please explain why the stack information, namely the gas flow rate and velocity information, is for all four boilers and not adjusted to reflect only the Nos. 1 and 2 Bark Boilers.

**Response:** All four boilers at Buckeye are permitted to operate simultaneously at maximum load. Since the boilers are permitted to operate simultaneously, and they share a common stack, it is appropriate to model this scenario. The permitted scenario was modeled in the HBCA application, and demonstrated impacts below the hazard quotient.

Current normal operation is Nos. 1 and 2 Bark Boilers operating at full load with No. 1 Power Boiler operating at half load and No. 2 Power Boiler shutdown. Therefore, an additional scenario to represent normal operating mode was developed and modeled. The normal mode operating data is presented in Table A. No changes in emissions from that shown in the HBCA application are indicated, since the two bark boilers remain at full load operation.

The impacts resulting from the normal mode operation are presented in Table B and are below the hazard quotient for manganese. Both tables, Tables A and B, are included with this correspondence.

**Comment 6.** There appear to be several instances where alternate test methods were utilized in the analysis of the bark fuel. Did this mill receive EPA approval for these test methods?

**Please provide the Department a copy of the EPA approvals for use of these test methods.**

**Response:** Appendix A to Part 63, Subpart DDDDD, contains the requirements for demonstration of the HBCA for manganese and the contents of the demonstration. Appendix A, Section 8(a)(3), includes "fuel analysis for each fuel and emission point which has been conducted including collection and analytical methods used." Appendix A does not require any pre-approval. It is anticipated that a formal performance test (fuel sampling and analysis) will be required within 180 days of the Boiler MACT compliance date (September 13, 2007), which will require a site-specific test plan per 40 CFR 63.7521(b).

On December 6, 2006, the U.S. Environmental Protection Agency (EPA) published amendments to Subpart DDDDD; Volume 71, Number 234. Table 1, List of Equivalent Methods, was updated to include those methods that EPA had previously reviewed and approved. The analytical methods used by Buckeye in its HBCA demonstration are now specifically listed in the original rule or in these recent amendments.

Additionally, in the December 6 amendments, EPA stated:

*We emphasize that equivalent methods may be used in lieu of the prescribed methods in Table 6 to Subpart DDDDD at the discretion of the source owner or operator. Therefore, maintaining a list of "approved methods" in the final rule is not necessary. Similarly, approval of equivalent methods by EPA or the delegated implementation authority is not necessary.*

**Comment 7.** 40 CFR 63.7521(b) requires a facility to develop and submit a site-specific fuel analysis plan for review and approval no later than 60 days before the date that the compliance demonstration is intended. The Department is not in receipt of such a plan for this mill. Will the mill be submitting the site-specific fuel analysis plan at a later date?

**Response:** 40 CFR 63.7521(b) requires the submittal of a site-specific fuel analysis plan for compliance purposes. Appendix A of 40 CFR 63, Subpart DDDDD, states that the HBCA demonstration must contain the "fuel analyses for each fuel and emission point which has been conducted including the collection and analytical methods used." The collection and analytical methods were submitted in the HBCA application as Table A-5. Buckeye is not aware of any requirement in Appendix A to submit a site-specific fuel analysis plan prior to submittal of the HBCA application. However, Buckeye intends to submit a fuel analysis plan according to 40 CFR 63.7521(b) when required to demonstrate compliance with the Subpart DDDDD TSM limits (i.e., within 180 days of September 13, 2007). This site-specific fuel analysis plan will be submitted 60 days prior to conducting the fuel sampling, as required by 40 CFR 63.7521(b)(1).

**Comment 8.** 40 CFR 63.7521(c) requires that at a minimum, three composite fuel samples for each type of fuel be obtained according to the procedures in 40 CFR 63.7521(c)(1) or (2). Please explain why, given these requirements, that only one sample was obtained of the tall oil? Please explain why the tall oil was not sampled for manganese? Section 4 paragraph (2) of Appendix A states that in order to determine eligibility for the compliance alternative for TSM, the Subpart DDDDD units at the facility must be tested for manganese.

**Response:** Only one tall oil sample has been collected as part of a previous application to compare various pollutant concentrations in tall oil to No. 6 fuel oil. Manganese was not included in the testing. Tall oil is used only as an alternative fuel to No. 6 fuel oil and very little tall oil is expected to be burned. Based on available data, manganese concentrations in tall oil are extremely low. Because of the expected low concentration of manganese and expected low use of tall oil, the single sample was deemed

appropriate. It is anticipated that a formal performance test (fuel sampling and analysis) will be required within 180 days of the Boiler MACT compliance date (September 13, 2007), which will require a site-specific test plan per 40 CFR 63.7521(b). Three composite fuel samples will be obtained for the performance test, according to 40 CFR 63.7521(c).

**Comment 9.** Please explain why the No. 6 fuel oil fuel analyses were the results of test conducted in February 2005 instead of 2006 sampling? Where were these samples collected? Do these samples contain any facility-generated used oil? How is the facility-generated used oil fired in the boilers? Is there a dedicated tank for facility-generated used oil? From this tank it is added to the No. 6 fuel oil storage system? Or is the facility-generated used oil added directly to the No. 6 fuel oil storage system?

**Response:** Appendix A only requires that the fuel sampling and analysis be submitted. Appendix A does not require the fuel samples be obtained within a given timeframe. Therefore, the 2005 test on No. 6 fuel oil was considered sufficient and no additional testing was considered necessary. It is anticipated that a formal performance test (fuel sampling and analysis) will be required within 180 days of the Boiler MACT compliance date (September 13, 2007), which will require a site-specific test plan per 40 CFR 63.7521(b).

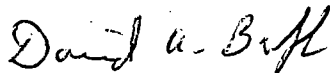
The No. 6 fuel oil samples were collected from the Lime Kiln Day Tank, which is fed from a 200,000-gallon No. 6 fuel oil bulk storage tank that is normally kept greater than 50-percent full. Facility-generated used oil is collected in 450-gallon portable totes and pumped into the No. 6 fuel oil bulk storage tank. This process occurs randomly as the portable totes become full. The No. 6 fuel oil samples obtained in February 2005 contained some concentration of facility-generated used oil, but the amount was small based on the respective volumes of the No. 6 fuel oil storage tank and the amount of used oil added. In addition, the amount is variable based on the batch operation.

Signed responsible official (R.O.) and professional engineer (P.E.) certification statements are included with this RAI response.

Thank you for consideration of this information. If you have any questions, please do not hesitate to call me at (352) 336-5600.

Sincerely,

GOLDER ASSOCIATES INC.



David A. Buff, P.E., Q.E.P.  
Principal Engineer



E. Claire Booth, E.I.  
Staff Engineer

CB/DB/all

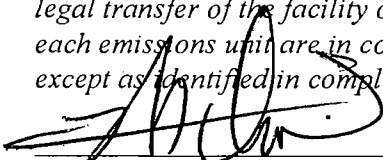
Enclosures

cc: Dave Weeden, Buckeye  
Ray Perry, Buckeye

Y:\Projects\2006\0637560 Buckeye Foley Mill\HBCA\4.1\RAI JAN 2007\FINAL\L011607-560.doc

**Application Responsible Official Certification**

Complete if applying for an initial/revise/renewal Title V permit or concurrent processing of an air construction permit and a revised/renewal Title V permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

1. Application Responsible Official Name: <b>Mr. Howard A. Drew, V.P. Wood Cellulose Manufacturing</b>
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input checked="" type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> The designated representative at an Acid Rain source.
3. Application Responsible Official Mailing Address... Organization/Firm: <b>Buckeye Florida</b> Street Address: <b>One Buckeye Drive</b> City: <b>Perry</b> State: <b>FL</b> Zip Code: <b>32348</b>
4. Application Responsible Official Telephone Numbers... Telephone: <b>(850) 584 - 1656</b> ext. Fax: <b>(850) 584 - 1722</b>
5. Application Responsible Official Email Address: <b>howard_drew@bkitech.com</b>
6. Application Responsible Official Certification: <i>I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.</i>  Signature _____ Date <u>1/9/07</u>

**Professional Engineer Certification**

1. Professional Engineer Name: **David A. Buff**  
Registration Number: **19011**

2. Professional Engineer Mailing Address...  
Organization/Firm: **Golder Associates Inc.\*\***  
Street Address: **6241 NW 23<sup>rd</sup> Street, Suite 500**  
City: **Gainesville** State: **FL** Zip Code: **32653**

3. Professional Engineer Telephone Numbers...  
Telephone: **(352) 336-5600** ext. **545** Fax: **(352) 336-6603**

4. Professional Engineer Email Address: **dbuff@golder.com**

5. Professional Engineer Statement:

*I, the undersigned, hereby certify, except as particularly noted herein\*, that:*

*(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and*

*(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.*

*(3) If the purpose of this application is to obtain a Title V air operation permit (check here , if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.*

*(4) If the purpose of this application is to obtain an air construction permit (check here , if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here , if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.*

*(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here , if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.*

*David A. Buff*  
\_\_\_\_\_  
Signature

*1/15/07*  
\_\_\_\_\_  
Date

(seal)

\* Attach any exception to certification statement.

\*\* Board of Professional Engineers Certificate of Authorization #00001670

**TABLE A**  
**STACK AND OPERATING PARAMETERS AND LOCATIONS USED IN THE HBCA MODELING ANALYSIS FOR NORMAL OPERATING MODE,**  
**BUCKEYE FLORIDA, FOLEY MILL**

Emission Unit	Model ID	UTM Coordinates <sup>a</sup>		Stack Data <sup>b</sup>						Heat Input (MMBtu/hr)	Operating Data <sup>b</sup>				
		East (m)	North (m)	Height		Diameter		Area			Temperature		Gas Flow (acfm)	Velocity	
				ft	m	ft	m	ft <sup>2</sup>	m <sup>2</sup>		°F	°K		ft/s	m/s
No. 1 Bark Boiler <sup>c</sup>	COMBO	256,564.2	3,328,847.6	225	68.6	13.0	3.96	132.73	12.33	300	168	349	375,073	47.1	14.35
No. 2 Bark Boiler <sup>c</sup>															

## Notes:

<sup>a</sup> Universal transverse coordinates, zone 17.

<sup>b</sup> Stack and operating data based on Title V renewal application (2005); represents parameters for common stack.

<sup>c</sup> Flue gases from the Nos. 1 and 2 Bark Boilers exhaust through a common stack with Nos. 1 and 2 Power Boilers. Normal operation is Nos. 1 and 2 Bark Boilers operating at full load with No. 1 Power Boiler operating at half load and No. 2 Power Boiler down. Normal operation is reflected in the temperature, gas flow rate and velocity, based on the following individual flows and temperatures:

No. 1 Bark Boiler (100% load): 115,073 acfm, 160°F

No. 2 Bark Boiler (100% load): 220,000 acfm, 150°F

No. 1 Power Boiler (50% load): 40,000 acfm, 325°F



**TABLE B**  
**MAXIMUM PREDICTED MANGANESE IMPACTS FOR NORMAL OPERATING MODE,**  
**BUCKEYE FLORIDA, FOLEY MILL**

Averaging Period	Year	Maximum Predicted Impact ( $\mu\text{g}/\text{m}^3$ )	Receptor Location <sup>a</sup>		Mn Criteria ( $\mu\text{g}/\text{m}^3$ )	Hazard Quotient <sup>b</sup>
			East (m)	North (m)		
Annual	2001	0.045	255772	3328667	0.05	0.90
	2002	0.046	255772	3328763		0.92
	2003	0.049	256300	3329667		0.99
	2004	0.045	256265	3329632		0.90
	2005	0.043	256548	3328151		0.86

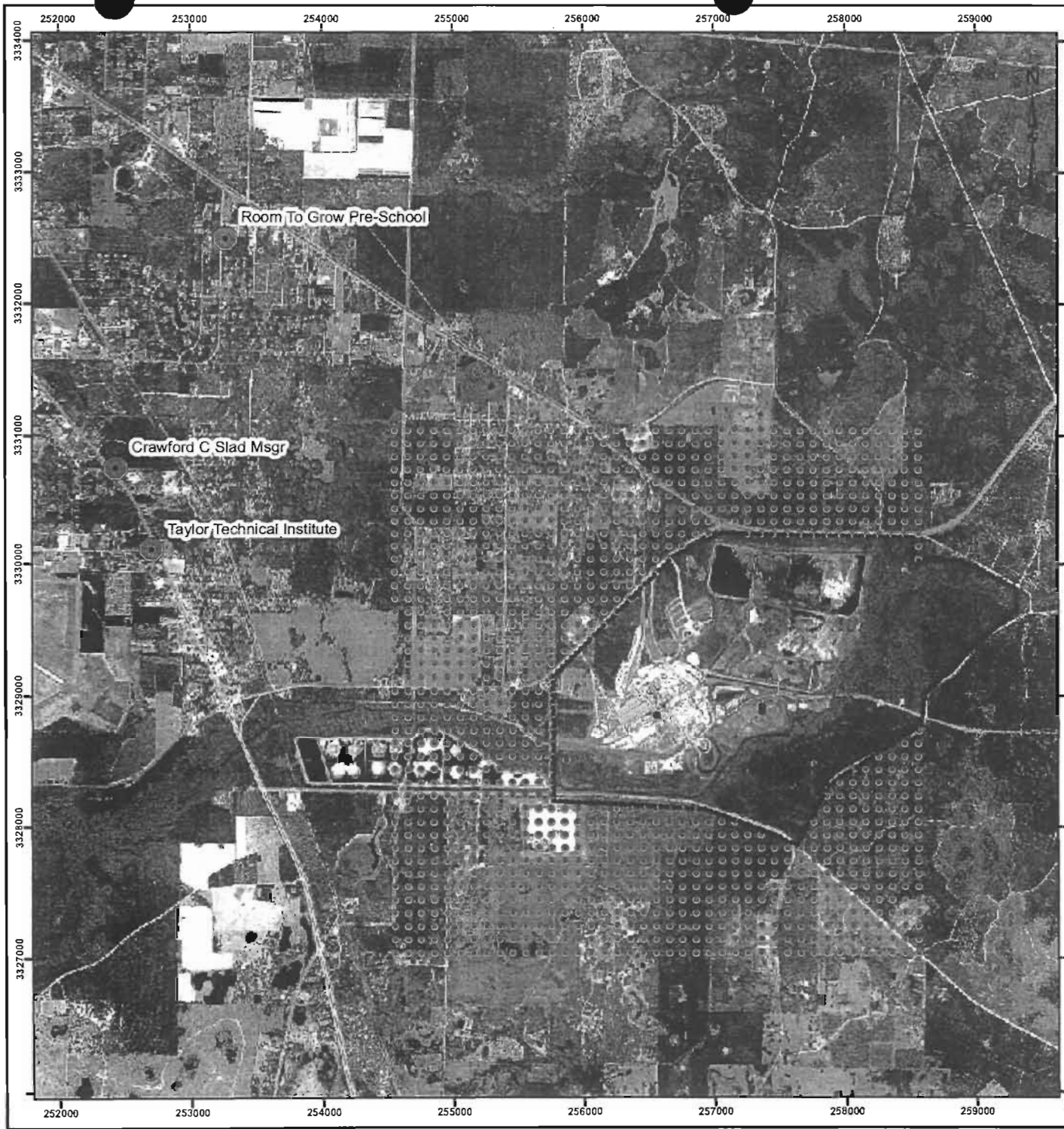
<sup>a</sup> UTM coordinates in Zone 17.

<sup>b</sup> The Hazard Quotient is determined by dividing the maximum predicted impact by the Mn Criteria concentration ( $0.05 \mu\text{g}/\text{m}^3$ )

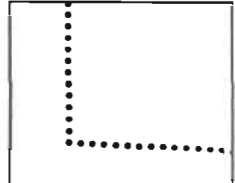
Notes:

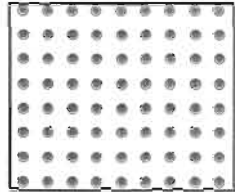
Concentrations are highest predicted with AERMOD model and 5 years of meteorological data from Tallahassee, 2001-2005.


$\mu\text{g}/\text{m}^3$ =micrograms per cubic meter



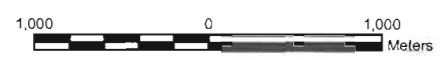
**LEGEND**


 Property Boundary  
 - 50m Spacing


 Receptor Grid:  
 - 100m Spacing



 Sensitive Area

**REFERENCE**  
 Projection: Transverse Mercator Datum: NAD 27 Coordinate System: UTM Zone 17



**PROJECT**  
 Health-based Compliance Alternative Demonstration for the  
 Buckeye Foley Mill

**TITLE**  
 Receptor Grid Locations and Sensitive Areas  
 Overlaid on an Aerial Photograph

 <b>Golder Associates</b> <small>Gainesville, Florida</small>	PROJECT No.	SCALE AS SHOWN	REV. 0
	DESIGN AB 10 Sept. 2000		
	GS AB 06 Sept. 2000		
	CHECK CB 07 Sept. 2000		
	REVIEW DB 10 Sept. 2000		

**FIGURE A**

**Phillips, Cindy**

---

**From:** Koerner, Jeff  
**Sent:** Tuesday, February 13, 2007 10:44 AM  
**To:** Felton-Smith, Rita  
**Cc:** Phillips, Cindy  
**Subject:** RE: 40 CFR 63 Subpart DDDDD (Boiler MACT) Fuel Analysis statement

Rita,

With regard to the NESHAP requirements, it looks like a plant must do initial fuel sampling/analyses to demonstrate compliance. I believe this method is intended to be conservative since reductions due to control equipment are not considered. Subsequent fuel sampling/analyses is required at 5-year intervals unless a change in fuels is requested or a new fuel is requested.

I see potential problems for fuels with variable contaminant levels, for example, wastewater wood fiber residuals. I'm not sure if the mercury and other metal contaminants are found in relatively the same concentrations from batch to batch or whether there may be spikes. I think I'd be less concerned if we were looking and bark/wood.

Cindy, what do you think?

Jeff

---

**From:** Felton-Smith, Rita  
**Sent:** Tuesday, February 06, 2007 12:29 PM  
**To:** Phillips, Cindy; Koerner, Jeff  
**Cc:** AlNahdy, Khalid; Lim, Meng; Maybin, Leslie  
**Subject:** 40 CFR 63 Subpart DDDDD (Boiler MACT) Fuel Analysis statement

Cindy and Jeff,

I have only scanned Buckeye's response to the RAI for their Health Based Compliance Alternative Demonstration with the Boiler MACT, but a statement they made is standing out. I am assuming that the other mills made similar statements in their responses.

Jeff, I believe this is going to have a tie-in to the Smurfit No. 5 Power Boiler -Boiler MACT /40 CFR 61 Subpart E issue also.

40 CFR 63.7515(f) states that once compliance is demonstrated via the fuel sampling, additional fuel sampling is only required on a once every 5 year basis or when a new type of fuel is burned.

Rule 62-297.310(7)(a)4.,c, F.A.C. states that a compliance test shall be conducted during each federal fiscal year for each NESHAP pollutant if there is an applicable standard unless otherwise specified by rule, order, or permit.

Realizing the "otherwise specified by rule, order or permit" gives us some wiggle room, are we going to an every 5 year basis to be consistent with the federal standard or remain each federal fiscal year per the State rule, which is and can be more stringent than the federal regulation?

My thoughts are that we should probably inform these facilities now if we are going with the once each federal fiscal year requirement as opposed to later on in a Title V Revision.

Thank you.

Rita

**Rita Felton-Smith**  
**Air Permitting Engineer IV**  
**Florida Department of Environmental Protection**  
**Northeast District**  
**(904) 807- 3237**



## Phillips, Cindy

---

**From:** Koerner, Jeff  
**Sent:** Tuesday, February 13, 2007 10:45 AM  
**To:** Phillips, Cindy  
**Subject:** FW: 40 CFR 63 Subpart DDDDD (Boiler MACT) Fuel Analysis statement

Cindy,

FYI. This is what I sent Rita on her other question. She may or may not have copied you.

Thanks!

Jeff

---

**From:** Koerner, Jeff  
**Sent:** Friday, February 09, 2007 3:37 PM  
**To:** Felton-Smith, Rita  
**Subject:** RE: 40 CFR 63 Subpart DDDDD (Boiler MACT) Fuel Analysis statement

Rita,

This is what I think I know, based on what you've provided:

- Smurfit-Stone is currently approved (Title V Permit) to burn a wastewater wood fiber residual. This material can contain some mercury.
- 40 CFR 61, Subpart E allows 7.1 lb/24-hours (0.294 lb/hour) for this type of material. If they ever emitted at this rate, they should have obtained a PSD permit for their previous "approval".
- A May 2005 test indicates actual mercury emissions of 0.00042 lb/hour (< 4 lb/year).
- 40 CFR 63, Subpart DDDDD allows  $9.0 \times 10^{-06}$  lb/MMBtu, which is 0.00725 lb/hour according to the Smurfit-Stone letter.
- Smurfit-Stone has a pending application that requests the NESHAP Subpart DDDDD limit of  $9.0 \times 10^{-06}$  lb/MMBtu (0.00725 lb/hour, ~ 64 lb/year).

Based on the above, it sounds like you could accept their request for a limit of  $9.0 \times 10^{-06}$  lb/MMBtu (AC permit), require testing, and require sampling and analysis of the wastewater wood fiber residuals as they are received. With our rule authority, you could require annual tests. If you believe that the actual emissions are so low that annual testing is not warranted, you could require a test prior to renewal. In any case, they should be required to sample and analyze the wastewater wood fiber residuals for mercury (and other expected metals if necessary) to bridge the gap between tests.

I hope this answers your question. Sorry it took so long to get back.

Good luck!

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

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**From:** Felton-Smith, Rita  
**Sent:** Tuesday, February 06, 2007 12:29 PM  
**To:** Phillips, Cindy; Koerner, Jeff  
**Cc:** AlNahdy, Khalid; Lim, Meng; Maybin, Leslie  
**Subject:** 40 CFR 63 Subpart DDDDD (Boiler MACT) Fuel Analysis statement

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Rule 62-297.310(7)(a)4.,c, F.A.C. states that a compliance test shall be conducted during each federal fiscal year for each NESHAP pollutant if there is an applicable standard unless otherwise specified by rule, order, or permit.

Realizing the "otherwise specified by rule, order or permit" gives us some wiggle room, are we going to an every 5 year basis to be consistent with the federal standard or remain each federal fiscal year per the State rule, which is and can be more stringent than the federal regulation?

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Thank you.

Rita

**Rita Felton-Smith**  
**Air Permitting Engineer IV**  
**Florida Department of Environmental Protection**  
**Northeast District**  
**(904) 807- 3237**  
**Rita.Felton-Smith@dep.state.fl.us**



# Department of Environmental Protection

**Jeb Bush**  
Governor

Northeast District  
7825 Baymeadows Way, Suite B200  
Jacksonville, Florida 32256-7590

**Colleen Castille**  
Secretary

November 13, 2006

Mr. Howard A. Drew, V.P., Wood Cellulose Manufacturing  
Buckeye Florida Limited Partnership  
One Buckeye Drive  
Perry, Florida 32348

Taylor County –Air Permitting  
Buckeye Florida Limited Partnership  
Request for Additional Information Regarding HBCA Title V Permit Revision Application

Dear Mr. Drew:

On September 14, 2006, the Department received your application for a Title V Permit Revision.

However, in order to continue processing your application, the Department will need the below additional information pursuant to Rule 62-213.420(1)(b)4., F.A.C., and Rule 62-4.070(1), F.A.C. Should your response to any of the following items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

1. Please describe the location where the samples of the solid fuel were collected for the fuel analysis and describe the fuel conveyor system. Please also provide a flow diagram of the fuel conveyor system.
2. In Figure 4-2 Receptor Grid Locations, please indicate what are the sensitive receptors (for example, school, daycare, senior community, hospital).
3. The mill has proposed a manganese emissions limit of 6.10E-03 lb/MMBtu as a federally enforceable condition in the Title V permit for both the Nos. 1 and 2 Bark Boilers. Please realize that such permit conditions and limitations will more than likely require compliance demonstrations. Please state how the mill intends to demonstrate compliance with the proposed manganese emission limits.
4. The mill has proposed the heat input rates to the two boilers as federally enforceable conditions in the Title V Permit. However, it is stated that the averaging time for these heat input rates are 24-hours. Please note that the averaging times in the current Title V Permit are not based on 24-hours. Please explain this statement.
5. The stack information presented in Table 2-2 reflects the common stack shared by the Nos. 1 and 2 Power Boilers, and Nos. 1 and 2 Bark Boilers. Given, that the Nos. 1 and 2 Power Boilers are not stated 40 CFR Subpart DDDDD sources, please explain why the stack information, namely the gas flow rate and velocity information, is for all four boilers and not adjusted to reflect only the Nos. 1 and 2 Bark Boilers.

6. There appear to be several instances where alternate test methods were utilized in the analysis of the bark fuel. Did this mill receive EPA approval for these test methods? Please provide the Department a copy of the EPA approvals for use of these test methods.
7. 40 CFR 63.7521(b) requires a facility to develop and submit a site-specific fuel analysis plan for review and approval no later than 60 days before the date that the compliance demonstration is intended. The Department is not in receipt of such a plan for this mill. Will the mill be submitting the site-specific fuel analysis plan at a later date?
8. 40 CFR 63.7521(c) requires that at a minimum, three composite fuel samples for each type of fuel be obtained according to the procedures in 40 CFR 63.7521(c)(1) or (2). Please explain why, given these requirements, that only one sample was obtained of the tall oil? Please explain why the tall oil was not sampled for Manganese? Section 4 paragraph (2) of Appendix A states that in order to determine eligibility for the compliance alternative for TSM, the Subpart DDDDD units at the facility must be tested for manganese.
9. Please explain why the No. 6 fuel oil fuel analyses were the results of test conducted in February 2005 instead of 2006 sampling? Where were these samples collected? Do these samples contain any facility-generated used oil? How is the facility-generated used oil fired in the boilers? Is there a dedicated tank for facility-generated used oil? From this tank it is added to the No. 6 fuel oil storage system? Or is the facility-generated used oil added directly to the No. 6 fuel oil storage system?

Responsible Official (R.O.) Certification Statement:

Rule 62-213.420, F.A.C. requires that a responsible official must certify all Title V permit applications. Due to the nature of the information requested above, the responsible official should certify your response. Please complete and submit a new R.O. certification statement page from the Application for Air Permit – Title V Source, DEP Form No. 62-210.900(1), effective February 2, 2006.

Professional Engineer (P.E.) Certification Statement:

Rule 62-4.050(3), F.A.C. requires that a professional engineer registered in the State of Florida certify all applications for a Department permit. This requirement also applies to responses to Department requests for additional information of an engineering nature. As a result, a professional engineer registered in the State of Florida should certify your response. Please complete and submit a new P.E. certification statement page from the Application for Air Permit – Title V Source, DEP Form No. 62-210.900(1), effective February 2, 2006.



Mr. Howard A. Drew, V.P., Wood Cellulose Manufacturing  
Buckeye Florida Limited Partnership  
Request For Additional Information  
Page Three

The Department must receive a response from you within 90 (ninety) days of receipt of this letter, unless you (the applicant) request additional time under Rule 62-213.420(1)(b)6., F.A.C.

If you should have any questions, please call Rita Felton-Smith at (904) 807-3237.

Sincerely,

A handwritten signature in black ink, appearing to read "Christopher L. Kirts". The signature is fluid and cursive, with the first name being the most prominent.

Christopher L. Kirts, P.E.  
District Air Program Administrator

CLK:RFS

Cc:

David A. Buff, P.E., Golder Associates, Inc.  
Dave Weeden, Environmental Regulator Support Manager, Buckeye Florida Limited Partnership

ARMINV50

POINT	AIRS ID	1230001	STATUS	A	OFFICE	NED	NE: JACKSONVILLE
SITE NAME	BUCKEYE FLORIDA, LIMITED PARTNERSHIP			COUNTY	TAYLOR		
OWNER/COMP	BUCKEYE FLORIDA, LIMITED PARTNERSHIP						

EU ID *	Stat	Description
002	A	#1 PWR BLR #6 FO/NAT GAS 250 MMBTU COMM STK W/SRC 3,4,19 A1A
003	A	#2 PWR BLR #6 FO/NAT GAS 2.5%S250MMBTU COMM STK W/SRC2,4,19P
004	A	#1 BARK BLR W/CYCLONE & VENTURI SCRBBR COMM STCK W/SRC 2,3,1
006	A	#2 RECOVERY BOILER W/ ESP & TRS BLOX SYS A
007	A	#3 RECOVERY BOILER W/1 dry ESP & BLOX A
011	A	#4 RECOVERY BLR,LOW ODOR DESIGN,ELECTROSTATIC PREC.FOR PM CO
019	A	#2 BARK BOILER W/CYCLONE & SCRUBBER, COMMON STACK A
021	A	#2 SMELT DISSOLVING TANK FOR #2 RB W/WET SCRUBBER
022	A	#3 SMELT DISSOLVING TANK FOR #3 RB W/WET SCRUBBER
023	A	#4 SMELT DISSOLVING TANK W/WET SCRUBBER CONTROL
024	A	#4 LIME KILN W/ ESP FOR PM & TRS CEMS A

ARMINV50

POINT	AIRS ID	1230001	STATUS	A	OFFICE	NED	NE: JACKSONVILLE
SITE NAME	BUCKEYE FLORIDA, LIMITED PARTNERSHIP				COUNTY	TAYLOR	
OWNER/COMP	BUCKEYE FLORIDA, LIMITED PARTNERSHIP						

EU ID *	Stat	Description
025	A	2 LIME SLAKERS, W/ SCRUBBER
040	A	TALL OIL PLANT W/ WET SCRUBBER
041	A	#2 PURIFICATION PLANT
045	A	#1 PURIFICATION PLT MOD TO USE CLO2 & MOD SCRUBBER.
046	A	the pulping system - MACT 1
047	A	FACILITY-WIDE MISCELLANEOUS/FACILITY-WIDE FUGITIVE EMISSIONS
048	A	CHEMICAL RECOVERY AREA
049	A	DRYING/CONVERTING/WAREHOUSE
050	A	WOOD YARD
026	I	LIME (CAUSTIC) STRG BINS (2) W/ BAGHOUSE
027	I	INACTIVE WATER TREAT LIME STRG BINS (2) W/ BAGHOUSE

EU ID	004	#1 BARK BLR W/CYCLONE & VENTURI SCRBBR COMM.STCK W/SRC 2,3,1	ST	A
Type	<input checked="" type="checkbox"/>	AN EMISSION POINT SERVING TWO OR MORE EMISSIONS	Stack No.	004
Identification				
Discharge Type	V	A STACK WITH AN UNOBSTRUCTED OPENING DISCHARGING IN A VERTICAL/NEARLY VER		
Water Vapor %		GEP Height		Ft
Flow Rate	100700	acfm	Stack Height	225 Ft
Dry Std Flow		dscfm	Non Stack Ht	
			Exit Temperature	142 F
			Exit Diameter	13.00 Ft
			Exit Velocity	12.6 Ft/Sec
UTM Zone	East	North	Latitude	Longitude
DEP Comment	SHARE WITH SRC 2,3,19. MEE AND BATCH DIGESTER SYSTEMS VENT TRS GASES TO THE NO. 1			

EU ID	019	#2 BARK BOILER W/CYCLONE & SCRUBBER, COMMON STACK	A	ST	A						
Type	<input checked="" type="checkbox"/>	AN EMISSION POINT SERVING TWO OR MORE EMISSIONS			Stack No	019					
Identification	<input type="text"/>										
Discharge Type	<input type="text"/>										
Water Vapor %	<input type="text"/>	GEP Height	<input type="text"/>	Ft	Exit Temperature	200 F					
Flow Rate	265000	acfm	Stack Height	225	Ft	Exit Diameter	13.00	Ft			
Dry Std Flow	<input type="text"/>	dscfm	Non Stack Ht	<input type="text"/>	Ft	Exit Velocity	33.0	Ft/Sec			
UTM Zone	<input type="text"/>	East	<input type="text"/>	North	<input type="text"/>	Latitude	<input type="text"/>	<input type="text"/>	Longitude	<input type="text"/>	<input type="text"/>
DEP Comment	SHARE WITH SRC 2,3,4 TEST @ 114'X114'-90.25 CSA=10.7'EQ DIA										