NESHAPS SUBPART DDDDD
HEALTH-BASED COMPLIANCE
ALTERNATIVE DEMONSTRATION

BUCKEYE FLORIDA, LIMITED PARTNERSHIP
FOLEY MILL
TAYLOR COUNTY, FLORIDA

Prepared For:

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0637560

Interoffice Memorandum

TO: Cindy Phillips MS 5505

FROM: Rita Smith NES

SUBJECT: 5D HBCA for Buckeye 1230001

DATE: 9/14/06

FYI

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1.0 INTRODUCTION

The Buckeye Florida, Limited Partnership (BKI) Foley Mill operates a Kraft pulp mill in Perry, Taylor County, Florida. BKI has two power boilers, two bark boilers, three recovery boilers, three smelt dissolving tanks, a lime kiln, two lime slakers, two lime storage bins, a tall oil plant, and other Kraft pulping equipment. Two bark boilers, No. 1 Bark Boiler and No. 2 Bark Boiler, are subject to 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Industrial, Commercial, and Institutional Boilers and Process Heaters (Boiler MACT). This report, entitled *"Health-Based Compliance Alternative Demonstration for the Buckeye Florida, Limited Partnership, Foley Mill, Taylor County, Florida"*, supports the determination that this facility meets the requirements established in Appendix A to Subpart DDDDD—*Methodology and Criteria for Demonstrating Eligibility for the Health-Based Compliance Alternatives*.

This report addresses the Health Based Compliance Alternative (HBCA) for manganese (Mn) in order to demonstrate compliance with the total selected metals (TSM) emission limit contained in Subpart DDDDD. TSM includes eight metals: arsenic, beryllium, cadmium, chromium, lead, manganese, nickel and selenium. The methodology used in the demonstration includes two options for demonstrating compliance. The first method is to conduct a look-up table analysis using the maximum hourly emissions from each emission unit subject to Subpart DDDDD that emits Mn. The second method is to conduct a site-specific demonstration using annual emissions and an acceptable risk assessment model. BKI will utilize the site-specific demonstration to show compliance with the Mn HBCA since building downwash may affect emissions from the boiler stacks.

To demonstrate compliance with the Mn HBCA, the maximum hourly Mn emission rate from each source subject to Subpart DDDDD that emits Mn must be determined according to Equation 1 in Appendix A. If the total calculated Mn emission rate from all Subpart DDDDD boilers is less than the value in the look-up table for Mn (Table 3, Appendix A), based on the weighted averaged stack height (Equation 3, Appendix A) and the minimum distance between any Subpart DDDDD emission point and the property boundary, the facility complies with the HBCA for Mn. By complying with the HBCA for TSM, the facility is allowed to exclude Mn from the TSM calculation for each Subpart DDDDD source when demonstrating compliance with the Boiler MACT standards.

If compliance is not demonstrated using the look-up table, the facility may perform a site-specific compliance demonstration. This option, as described in Appendix A of Subpart DDDDD, includes using a scientifically-accepted, peer-reviewed risk assessment methodology; examples of which

are found on the U.S. Environmental Protection Agency (EPA) Air Toxics Website (http://www.epa.gov/tnn/fera/risk_atoxic.html). Risk assessment modeling is performed to demonstrate that the maximum hazard quotient (HQ) for Mn from all Subpart DDDDD sources is less than or equal to 1.0.

HQ is the ratio of the predicted concentration of a pollutant to the concentration at which no adverse effects are expected. For inhalation exposures, the HQ is calculated as the air concentration divided by the reference concentration, also known as the reference value (RV). By demonstrating that the HQ for Mn is equal to or less than 1.0, the facility may exclude Mn from the TSM calculations for each Subpart DDDDD source when demonstrating compliance with Boiler MACT. The TSM emission limit in Subpart DDDDD is 0.001 pound per million British thermal units (lb/MMBtu) for existing boilers and 0.0003 lb/MMBtu for new boilers.

BKI will meet the hydrogen chloride (HCl) Boiler MACT limit through fuel analysis, which is why the HBCA for HCl will not be utilized in this demonstration.

For ease of reference, the required elements for the look-up table analysis and site-specific demonstration (specified in Section 8 of Appendix A to Subpart DDDDD) are cross-referenced in Table 1-1. The fuel sampling and analysis results are attached in Appendix A.

TABLE 1-1

CROSS-REFERENCE OF DEMONSTRATION REQUIREMENTS, 40 CFR 63, SUBPART DDDDD, APPENDIX A, SECTION 8

Requirement	Description	Report Section/Table/Figure Number
Look-Up Table Analysis		
(a) (1)	Identification of each appropriate emission point and the maximum rated capacity of each.	Table 2-1
(a) (2) (i)	Emission release type.	Table 2-1
(a) (2) (ii)	Stack height, stack area, stack gas temperature, and stack gas velocity.	Table 2-2
(a) (2) (iii)	Plot plan showing all emission points, nearby residences, and fenceline.	Figures 2-1 and 2-2
(a) (2) (iv)	Identification of any control devices used to reduce emissions from each emission point.	Table 2-1
(a) (3)	Emission test reports and the test methods, including a description of the worst-case process parameters. Fuel analysis for each fuel and emission point, including collection and analytical methods used.	Section 3.1, Appendix A
(a) (4)	Identification of the RV values used.	Section 4.0
(a) (5)	Calculations used to determine the HCl-equivalent or Mn emission rates.	Section 3.2
(a) (6)	Identification of the controlling process factors that will become federally enforceable permit conditions.	Not Applicable, Table 3-1
(b) (1)	Calculations used to determine the weighted average stack height.	Section 3.3, Table 3-2
(b) (2)	Identification of the Subpart DDDDD emission points that emit either Mn or HCl and Cl_2, with the minimum distance to the property boundary of the facility.	Section 3.3, Figure 3-1
(b) (3)	Comparison of the values in the look-up tables to the maximum HCl-equivalent or Mn emission rates.	Section 3.3, Table 3-3
(d)	Submittal of parameters for incorporation into Title V permit as federally enforceable limits.	Not Applicable

TABLE 1-1

CROSS-REFERENCE OF DEMONSTRATION REQUIREMENTS, 40 CFR 63, SUBPART DDDDD, APPENDIX A, SECTION 8

Requirement	Description	Report Section/Table/Figure Number
Site-Specific Compliance Demonstration		
(a) (1)	Identification of each appropriate emission point and the maximum rated capacity of each.	Table 2-1
(a) (2) (i)	Emission release type.	Table 2-1
(a) (2) (ii)	Stack height, stack area, stack gas temperature, and stack gas velocity.	Table 2-2
(a) (2) (iii)	Plot plan showing all emission points, nearby residences, and fenceline.	Figures 2-1 and 2-2
(a) (2) (iv)	Identification of any control devices used to reduce emissions from each emission point.	Table 2-1
(a) (3)	Emission test reports and the test methods, including a description of the worst-case process parameters. Fuel analysis for each fuel and emission point, including collection and analytical methods used.	Section 3.1, Appendix A
(a) (4)	Identification of the RV values used.	Section 4.0
(a) (5)	Calculations used to determine the HCl-equivalent or Mn emission rates.	Section 4.1.1, Table 4-1
(a) (6)	Identification of the controlling process factors that will become Federally enforceable permit conditions.	Table 5-1
(c) (1)	Identification of the risk assessment methodology used.	Section 4.1
(c) (2)	Documentation of the fate and transport model used.	Section 4.1.2
(c) (3)	Documentation of the fate and transport model inputs including the information in (a) (1) through (a) (5) and all the following that apply: meteorological data, building, land use, and terrain data; receptor locations and population data; and other facility-specific parameter inputs.	Appendix B
(c) (4)	Documentation of the fate and transport model outputs.	Appendix B
(c) (5)	Documentation of any exposure assessment and risk characterization calculations.	Not Applicable
(c) (6)	Comparison of the HQ or HI to the limit of 1.0.	Section 4.2, Table 4-3
(d)	Submittal of parameters for incorporation into Title V permit as federally enforceable limits.	Table 5-1, Appendix C

2.0 GENERAL DESCRIPTION OF THE FACILITY

2.1 General Facility Information

BKI owns and operates a Kraft pulping mill located in Perry, Taylor County, Florida that currently operates under Title V Permit No. 1230001-016-AV. Two bark boilers operate at the Foley Mill that are subject to 40 CFR Part 63, Subpart DDDDD (Boiler MACT). The bark boilers are shown in Table 2-1.

2.2 Boiler Characterization

Stack and operating parameters for the bark boilers are provided in Table 2-2. These parameters are used in the risk assessment modeling for each boiler. Stack and operating data for the sources are based on the Title V renewal application (May 2005). Nos. 1 and 2 Bark Boilers and Nos. 1 and 2 Power Boilers exhaust through a common stack, which is reflected in Table 2-2.

Figure 2-1 is a scale drawing showing the plot plan for the facility, including location of the emission points for each Boiler MACT boiler and the property boundary of the facility. Figure 2-2 is an aerial map of the facility.

TABLE 2-1
AFFECTED BOILERS ADDRESSED IN THE HBCA DEMONSTRATION, BUCKEYE FLORIDA, FOLEY MILL

Emission Unit	Model ID	Description	Maximum 1-Hour Heat Input Capacity (MMBtu/hr)	Fuel(s)	Control Device(s)
No. 1 Bark Boiler [a]	COMBO	Bark boiler - serves as the primary combustion device for TRS gases	300	Carbonaceous fuel; No. 6 fuel oil; tall oil; No. 2 Fuel oil; natural gas	Venturi scrubber
No. 2 Bark Boiler [a]	COMBO	Bark boiler	601	Carbonaceous fuel; No. 6 fuel oil; tall oil; No. 2 Fuel oil; natural gas	Venturi scrubber

Notes:
NCGs = non-condensible gases
TRS = total reduced sulfur

[a] Flue gases from the Nos. 1 and 2 Bark Boilers exhaust through a common stack. Nos.1 and 2 Power Boilers also exhaust through this common stack.

TABLE 2-2

STACK AND OPERATING PARAMETERS AND LOCATIONS USED IN THE HBCA MODELING ANALYSIS, BUCKEYE FLORIDA, FOLEY MILL

		UTM Coordinates [a]		Stack Data [b]							Operating Data [b]				
	Model	East	North	Height		Diameter		Area		Heat Input	Temperature		Gas Flow	Velocity	
Emission Unit	ID	(m)	(m)	ft	m	ft	m	ft^2	m^2	(MMBtu/hr)	°F	°K	(acfm)	ft/s	m/s
No. 1 Bark Boiler [c]	COMBO	256,564.2	3,328,847.6	225	68.6	13.0	3.96	132.73	12.33	300	200	366	495,073	62.2	18.9
No. 2 Bark Boiler [c]										601					

Notes:

[a] Universal transverse coordinates, zone 17.

[b] Stack and operating data based on Title V renewal application (2005); represents parameters for common stack.

[c] Flue gases from the Nos. 1 and 2 Bark Boilers exhaust through a common stack with Nos. 1 and 2 Power Boilers.

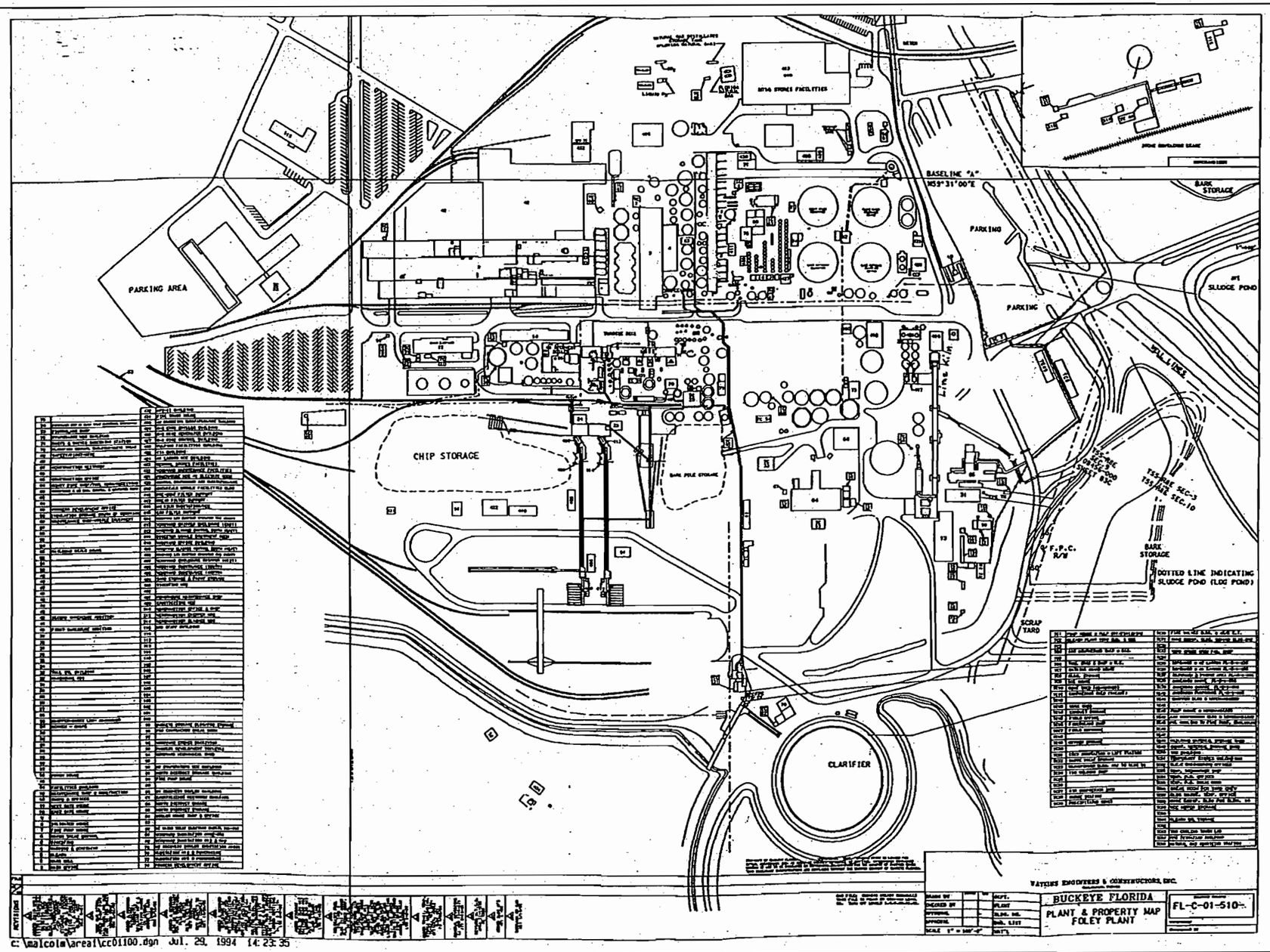


Figure 2-1
Facility Plot Plan
0637560/HBCA/4.4/Figure 2-1.doc

Source: Golder, 2006.

Golder Associates

LEGEND

REFERENCE

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

725 0 725 Meters

PROJECT

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

TITLE

Aerial of Facility

PROJECT No.			SCALE AS SHOWN	REV. 0
DESIGN	AB	08 Sept. 2006		
GIS	AB	08 Sept. 2006		
CHECK	CB	08 Sept. 2006		
REVIEW	CB	08 Sept. 2006		

Golder Associates Gainesville, Florida

FIGURE 2-2

063756/HBCA/4.4/Figure 2-2.pdf

3.0 HBCA – LOOK-UP TABLE ANALYSIS

3.1 Basic for Worst-Case Manganese Emissions

Fuel analysis data are attached, which are the basis of the emissions estimation for each boiler (see Appendix A):

- TSM HBCA
    - Emissions based on fuel analyses for Mn for the following boilers:
        - No. 1 Bark Boiler
        - No. 2 Bark Boiler

Appendix A includes the following information related to the fuel analysis:

- Collection and analytical methods used;
- Fuel analysis for bark/wood, No. 6 fuel oil, and tall oil; and
- Calculation of 90th percentile emission factor for Mn.

Both bark boilers are allowed to burn carbonaceous fuel, No. 6 fuel oil, No. 2 fuel oil, natural gas, and tall oil. However the worst-case fuel for Mn emissions from the Nos. 1 and 2 Bark Boilers is bark/wood (see Table A-1). The 90th percentile of historical fuel analysis data for manganese in bark/wood is 6.1×10^{-3} lb/MMBtu, as presented in Table A-1. This is based on fuel analysis data collected in August 2006. The 90th percentile of historical fuel analysis data for manganese in No. 6 fuel oil is 4.3×10^{-6} lb/MMBtu (see Table A-2). The 90th percentile value is required by the Boiler MACT regulations, and was calculated according to Equation 8 in 40 CFR 63.7530(d). Due to the limited tall oil data industry wide, it is assumed that the concentration of manganese in tall oil is equal to or less than the concentration of manganese in No. 6 fuel oil. Other parameters specific to tall oil are presented in Table A-3.

The Boiler MACT final rule fuel analysis methods are presented in Table A-4. The comparison of the fuel analysis methods utilized by BKI to the Boiler MACT final rule is presented in Table A-5. The bark/wood fuel collection procedure is also included in Table A-5.

It is noted that the fuel sampling/analysis procedures and methods met the Boiler MACT requirements except for a few minor deviations (see Table A-5). The equivalent methods for moisture content, chlorides, and heat content, as allowed by the Boiler MACT rule, were utilized in

the BKI bark/wood fuel analysis. The moisture content was determined by analyzing the percent total solids, EPA 160.3, and subtracting the result from 100-percent. The chloride concentration was determined by using the equivalent EPA Method SW-846-9056 and the heat content was determined by using the equivalent ASTM D240-87. In addition, SW-846-6010B was utilized for the TSM analysis. SW-846-6010B is the industry standard, is approved under Subpart DDDDD for the analysis of coal, and has lower detection limits than the Boiler MACT method, ASTM 885-88 (1996).

The Mn emission factor for the worst-case fuel (i.e., bark/woode) for both bark boilers is 6.1×10^{-3} lb/MMBtu.

3.2 Maximum Hourly Emission Rate for Manganese

The maximum hourly emission rate for the hazardous air pollutant (HAP) is expressed according to the equation below:

$$E_{i,s} = \sum_{j=1}^{t} (R_{i,j} \times I_j)$$

where: $E_{i,s}$ is the maximum hourly emission rate for the HAP in lb/hr,

$R_{i,j}$ is the emission rate of each emission unit in lb/MMBtu,

I_j is the maximum rated heat input capacity of each Subpart DDDDD unit in million British thermal units per hour (MMBtu/hr),

"i" represents each applicable HAP,

"s" represents each individual emission point,

"j" represents each Subpart DDDDD emission unit, and

"t" represents the total number of Subpart DDDDD emission units.

The maximum hourly emission rates for Mn from each emission unit are presented in Table 3-1 with a total maximum hourly emission rate of 5.50 lb/hr.

3.3 Look-Up Table Comparison for Manganese

The weighted average stack height for determining the maximum allowable emission rate for Mn from the look-up table is defined by the following equation:

$$H_{Mn} = \frac{\sum_{s=1}^{n}(E_{Mn,s} \times H_s)}{E_{Mn,T}}$$

where: H_{Mn} is the weighted average stack height in meters,

$E_{Mn,s}$ is the maximum hourly Mn emissions in lb/hr,

H_s is the height of each individual stack in meters,

$E_{Mn,T}$ is the total maximum hourly Mn emissions in lb/hr,

"s" represents the individual emission points, and

"n" represents the total number of emission points.

Using the stack heights and the maximum hourly Mn emissions, the weighted average stack height for Mn is 69 meters (see Table 3-2), as shown below:

$$H_{Mn} = \frac{376.9 \frac{lb-m}{hr}}{5.5 \frac{lb}{hr}} = 69 m$$

The minimum distance between any Subpart DDDDD stack and the property boundary, as shown in Figure 3-1, is 697 meters. The comparison between the maximum hourly Mn emission rate and the allowable emission rate in the look-up table is shown in Table 3-3. If the weighted averaged stack height or minimum distance values do not match the values in the look-up table, the next lowest value is used. For this analysis, the averaged weighted stack height for TSM is 69 meters. Therefore, the 60-meter stack height in the look-up table was used. In addition, the 500-meter distance to property boundary value in the look-up table was used since the actual minimum distance from any Subpart DDDDD source to the property boundary is 697 meters.

Because the value in the Mn look-up table is exceeded (see Table 3-3), and because building downwash may affect emissions from some of the boiler stacks, the site-specific determination was utilized to comply with the HBCA for Mn (see Section 4.0).

TABLE 3-1
WORST-CASE SHORT-TERM MANGANESE EMISSIONS, BUCKEYE FLORIDA, FOLEY MILL

Emission Unit	Model ID	Emission Estimation Method	Heat Input (MMBtu/hr)	Mn Emission Factor (lb/MMBtu) [a]	Maximum Hourly Mn Emission Rate (lb/hr)
No. 1 Bark Boiler	COMBO	Bark/Wood Fuel Analysis	300	6.10E-03	1.83
No. 2 Bark Boiler	COMBO	Bark/Wood Fuel Analysis	601	6.10E-03	3.67
	Total		--	--	**5.50**

[a] Based on the 90th percentile of historical stack test data for bark/wood (see Table A-1).

TABLE 3-2

WEIGHTED AVERAGED STACK HEIGHT (LOOK-UP TABLE ANALYSIS), BUCKEYE FLORIDA, FOLEY MILL

Emission Unit	Model ID	Stack Height (H_s) [a] (m)	Mn Maximum Hourly Emissions ($E_{Mn,s}$) [b] (lb/hr)	$E_{Mn,s}$ x H_s (lb-m/hr)	Mn Weighted Average Stack Height [c] (m)
No. 1 Bark Boiler [d] No. 2 Bark Boiler [d]	COMBO	68.6	5.50	376.9	--
	Total	--	**5.50**	**376.9**	**69**

[a] Based on Table 2-2.

[b] Based on Table 3-1.

[c] Subpart DDDDD, Appendix A, Equation 4.

[d] Flue gases from the Nos. 1 and 2 Bark Boilers exhaust through a common stack with Nos. 1 and 2 Power Boilers.

TABLE 3-3
LOOK-UP TABLE COMPARISON FOR MANGANESE, BUCKEYE FLORIDA, FOLEY MILL

HBCA	Weighted Averaged Stack Height (m)	Minimum Distance to Property Boundary (m) [a]	Look-Up Table Value (lb/hr) [b]	Calculated Emission Rate (lb/hr) [c]	Pass/Fail?
Mn	69	697	1.09	5.50	Fail

[a] Based on Figure 3-1.

[b] Based on Table 3 in Appendix A, Subpart DDDDD.

[c] Based on Table 3-2.

LEGEND

- Source Location
- Property Boundary

REFERENCE

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

130 0 130 Meters

PROJECT

Health-based Compliance Alternative Demonstration for the Buckeye Foley Mill

TITLE

Minimum Distance from Subpart DDDDD Source to Property Boundary

Golder Associates Gainesville, Florida

PROJECT NO.			SCALE AS SHOWN	REV. 0
DESIGN	AB	08 Sept. 2006		
GIS	AB	08 Sept. 2006		
CHECK	CB	08 Sept. 2006		
REVIEW	CB	08 Sept. 2006		

FIGURE 3-1

0637560/HBCA/4.4/Figure 3-1.pdf

4.0 HBCA – SITE-SPECIFIC DEMONSTRATION

In accordance with 40 CFR 63, Subpart DDDDD, Appendix A, this site-specific demonstration estimates the long-term inhalation exposure of Mn by estimating annual or multi-year average ambient concentrations for the individual most exposed to the facility's emissions. The corresponding chronic inhalation dose-response value or RV for Mn is used in this HBCA demonstration.

The RV is an estimate of a continuous inhalation exposure to the human population without causing deleterious effects during a lifetime. RV values for various chemicals are found in Prioritized Chronic Dose-Response Values (2/28/05), Table 1, published by the EPA Office of Air Quality Planning and Standards (OAQPS) at http://www.epa.gov/ttn/atw/toxsource/summary.html. Table 1 presents values for long-term (chronic) inhalation and oral exposures. Based on these values, the RV for Mn is 0.05 microgram per cubic meter ($\mu g/m^3$) based on non-cancer chronic inhalation.

4.1 Risk-Assessment Methodology

This section documents the air quality dispersion modeling analysis to support the site-specific inhalation risk assessment for the low-risk demonstration in accordance with Appendix A of Subpart DDDDD. The risk assessment and dispersion analysis methods follow the procedures established by the Air *Toxics Risk Assessment Reference Library, Volume 2: Facility-Specific Assessment* and EPA's *Guideline on Air Quality Models (Appendix W to 40 CFR Part 51).*

A more detailed description of the model, along with a discussion of the emissions inventory, model selection, building downwash effects, meteorological data, receptor locations, and other model input data, is presented in the following sections.

4.1.1 Emission Inventory

For the Foley Mill, annual emissions based on the bark/wood fuel analyses results are estimated for Mn. Annual Mn emissions for each boiler are provided in Table 4-1.

The operation of No. 1 and No. 2 Bark Boiler is unrestricted, therefore, the annual Mn emissions are based on 8,760 hours per year (hr/yr) of operation. The heat input values were obtained from the Title V renewal application (May 2005). In addition, the emission factors were obtained from the 90th percentile of historical bark/wood fuel analyses data (see Table A-1). As described in

Section 3.0, bark/wood is the worst-case fuel for manganese. The 90th percentile of the historical bark/wood data is 6.1×10^{-3} lb/MMBtu.

4.1.2 Model Selection

The American Meteorological Society and EPA Regulatory Model (AERMOD) dispersion model was used in the air quality modeling analysis to assess long-term off-site exposure due to manganese emissions from all Subpart DDDDD boilers at BKI.

On November 9, 2005, the EPA implemented AERMOD into its *Guideline of Air Quality Models (Appendix W to 40 CFR Part 51)* as the recommended model for regulatory modeling applications. The FDEP is allowing the use of AERMOD for air permitting projects as a replacement for the Industrial Source Complex Short-Term Model (ISCST3). The ISCST3 model will no longer be in effect as of November 9, 2006.

The AERMOD dispersion model (Version 04300) is available on the EPA's Internet web site, Support Center for Regulatory Air Models (SCRAM), within the Technical Transfer Network (TTN). A listing of AERMOD model features is presented in Table 4-2.

The EPA and FDEP recommend that the AERMOD model be used to predict pollutant concentrations at receptors located within 50 kilometers (km) from a source. The AERMOD model calculates hourly concentrations based on hourly meteorological data. The AERMOD model is applicable for most applications since it is recognized as containing the latest scientific algorithms for simulating plume behavior in all types of terrain. For evaluating plume behavior within the building wake of structures, the AERMOD model incorporates the Plume Rise Model Enhancement (PRIME) downwash algorithm developed by the Electric Power Research Institute (EPRI). AERMOD can predict pollutant concentrations for averaging times of annual and 24-, 8-, 3-, and 1-hours.

The AERMOD model was used to predict the maximum pollutant concentrations for BKI in nearby areas surrounding the facility. The predicted concentrations were then compared to the HQ for Mn.

For this analysis, the EPA regulatory default options were used to predict all maximum impacts. These options include:

- Final plume rise at all receptor locations
- Stack-tip downwash

- Buoyancy-induced dispersion
- Default wind speed profile coefficients
- Default vertical potential temperature gradients
- Calm wind processing

4.1.3 Building Downwash Effects

Based on the building dimensions associated with buildings and structures at the BKI, all stacks will comply with the good engineering practice (GEP) stack height regulations (i.e., the stacks do not exceed GEP height). However, these stacks are less than GEP height. Therefore, the potential for building downwash to occur was considered in the air modeling analysis for these stacks.

The location of the buildings used in downwash and the boiler stacks are presented in Figure 4-1. The stack serving the Nos. 1 and 2 Bark Boilers is labeled "COMBO" in Figure 4-1. All direction-specific building parameters were calculated with the Building Profile Input Program (BPIP), Version 04274.

4.1.4 Meteorological Data

Meteorological data used in the AERMOD model to determine air quality impacts consisted of a concurrent 5-year period of hourly surface weather observations and twice-daily upper air soundings from the National Weather Service (NWS) office located at Tallahassee Regional Airport (TLH). Concentrations were predicted using 5 years of hourly meteorological data from 2001 through 2005. The NWS office at TLH is located approximately 87.5 km (54 miles) west of the Foley Mill site and is the closest primary weather station to the study area considered to have wind patterns that are representative of the site.

The data for these stations were processed into a format that can be input to the AERMOD model using the meteorological preprocessor program AERMET. The data were acquired and processed by FDEP.

A unique feature of AERMOD is its incorporation of land use parameters for the processing of boundary layer parameters used for the dispersion. Based on the most recent regulatory guidance, the land use parameters should be representative of the data measurement site (i.e., TLH). Land use data, representing the average surface roughness, albedo, and Bowen ratio that exist within a 3-km radius of the NWS station at TLH were extracted from 1-degree land use files from the U.S. Geographical Survey (USGS) using the AERSURFACE program. AERSURFACE currently extracts

land use data in 12 wind direction sectors covering 360 degrees. The land use values for each wind direction sector were input into Stage 3 of the AERMET preprocessor program to create the surface and profile meteorological files that AERMOD requires.

4.1.5 Model Receptor Grid

For predicting maximum concentrations in the vicinity of the facility, more than 1,350 receptors were located at the facility's restricted property line and at offsite receptors and are presented in Figure 4-2. The receptors were modeled using the Universal Transverse Mercator (UTM) coordinate system from 17, North American Datum 1927 (NAD27).

Nested Cartesian receptor grids were used in addition to discrete Cartesian receptors along the facility fence line. The impact analysis used the following receptor spacing:

- 50-m intervals along the fence line, and
- 100-m intervals beyond the fence line to 2 km from the Foley Mill.

Receptor elevations and hill scale heights for all receptors were obtained from 7.5-minute USGS Digital Elevation Model (DEM) data using the AERMOD terrain preprocessor program AERMAP, Version 04300.

4.2 Dispersion Modeling Results

To evaluate long-term non-carcinogenic impacts, AERMOD was run for each of the 5 years of meteorological data and the predicted annual average concentrations for each year were evaluated. These results were used to determine the maximum annual Mn concentration at any receptor over the 5-year period.

The results of the dispersion modeling for Mn are provided in Table 4-3. The HQ for Mn is computed by dividing the modeled concentration by the respective RV. Table 4-3 indicates that that the HQ for Mn is less than 1.0 for all 5 years modeled. Therefore, the Mn HBCA risk requirement is achieved.

TABLE 4-1
MAXIMUM ANNUAL MANGANESE EMISSIONS, BUCKEYE FLORIDA, FOLEY MILL

HAP	Boiler ID	Model ID	Emission Estimation Method	Heat Input (MMBtu/hr)	Hours of Operation (hr/yr)	Manganese Emission Factor (lb/MMBtu) [a]	Maximum Short-Term Mn Emissions (lb/hr)	Maximum Short-Term Mn Emissions (g/s)	Maximum Annual Mn Emissions (TPY)
Mn	No. 1 Bark Boiler [b]	COMBO	Bark/Wood Fuel Analysis	300	8,760	6.10E-03	1.83	0.231	8.02
Mn	No. 2 Bark Boiler [b]	COMBO	Bark/Wood Fuel Analysis	601	8,760	6.10E-03	3.67	0.462	16.06
Total Mn				--	--	--	**5.50**	**0.693**	**24.07**

Notes:
MMBtu/hr = million British thermal units per hour
hr/yr = hour per year
lb/MMBtu = pound per million British thermal units
lb/hr = pound per hour
g/s = gram per second
TPY = tons per year

[a] Based on the 90th percentile of historical bark/wood fuel analysis data (see Table A-1).

[b] Flue gases from the Nos. 1 and 2 Bark Boilers exhaust through a common stack with the Nos. 1 and 2 Power Boilers.

TABLE 4-2

MAJOR FEATURES OF THE AERMOD MODEL, VERSION 04300

AERMOD Model Features
• Plume dispersion/growth rates are determined by the profile of vertical and horizontal turbulence, vary with height, and use a continuous growth function.
• In a convective atmosphere, uses three separate algorithms to describe plume behavior as it comes in contact with the mixed layer lid; in a stable atmosphere uses a mechanically mixed layer near the surface.
• Polar or Cartesian coordinate systems for receptor locations can be included directly or by an external file reference.
• Urban model dispersion is input as a function of city size and population density; sources can also be modeled individually as urban sources.
• Stable plume rise: uses Briggs equations with winds and temperature gradients at stack top up to half-way up to plume rise. Convective plume rise: plume superimposed on random convective velocities.
• Procedures suggested by Briggs (1974) for evaluating stack-tip downwash.
• Has capability of simulating point, volume, area, and multi-sized area sources.
• Accounts for the effects of vertical variations in wind and turbulence (Brower *et al.*, 1998).
• Uses measured and computed boundary layer parameters and similarity relationships to develop vertical profiles of wind, temperature, and turbulence (Brower *et al.*, 1998).
• Concentration estimates for 1-hour to annual average times.
• Creates vertical profiles of wind, temperature, and turbulence using all available measurement levels.
• Terrain features are depicted by use of a controlling hill elevation and a receptor point elevation.
• Modeling domain surface characteristics are determined by selected direction and month/season values of surface roughness length, Albedo, and Bowen ratio.
• Contains a mechanical and convective mixed layer height, the latter based on the hourly accumulation of sensible heat flux.
• The method of Pasquill (1976) to account for buoyancy-induced dispersion.
• A default regulatory option to set various model options and parameters to EPA-recommended values.
• Contains procedures for calm-wind and missing data for the processing of short term averages.

Note: AERMOD = the American Meteorological Society and Environmental Protection Agency Regulatory Model.

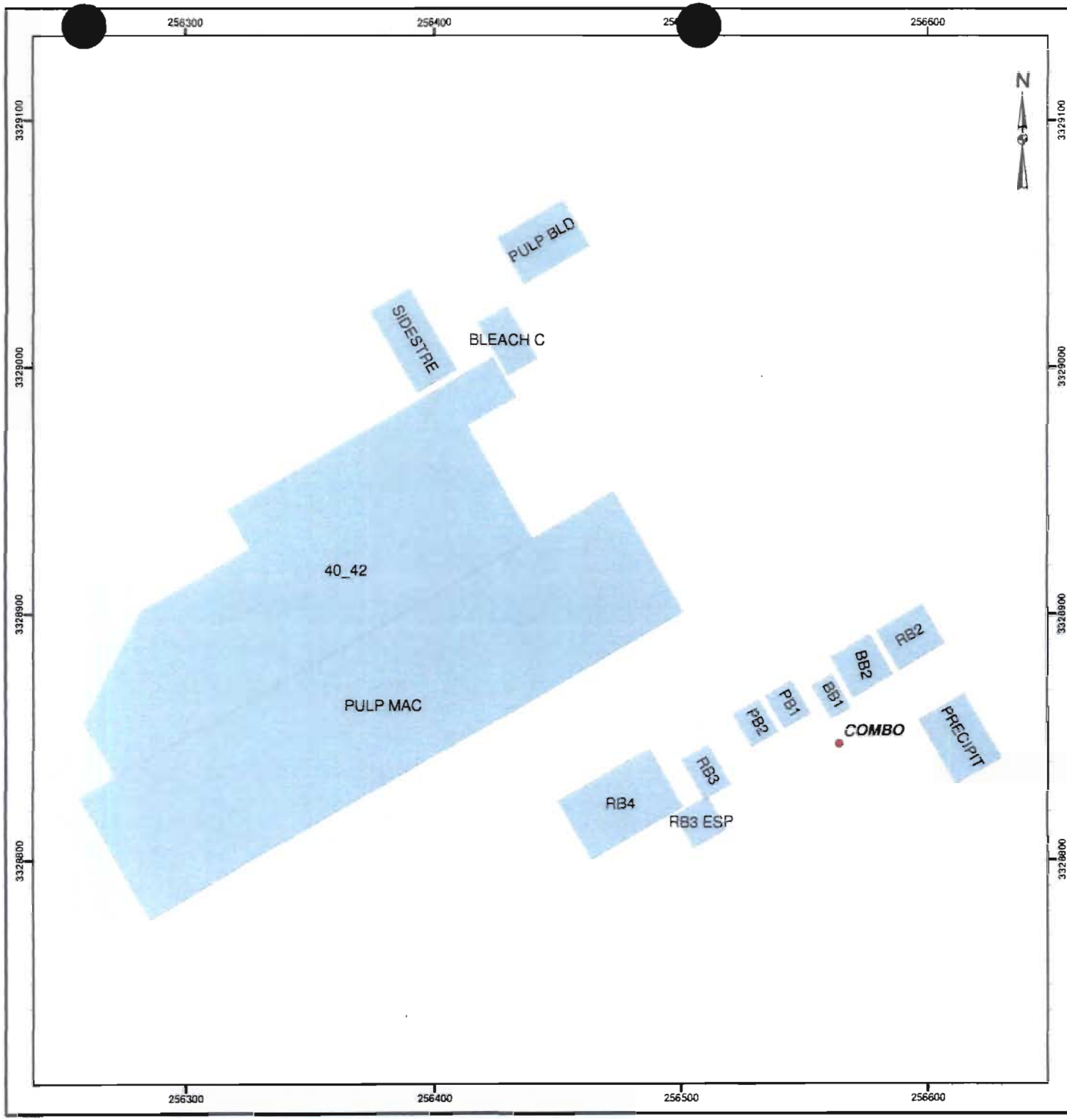
Source: Paine *et al.*, 2004.

TABLE 4-3
MAXIMUM PREDICTED MANGANESE IMPACTS, BUCKEYE FLORIDA, FOLEY MILL

Averaging Period	Year	Maximum Predicted Impact ($\mu g/m^3$)	Receptor Location [a] East (m)	Receptor Location [a] North (m)	Mn Criteria ($\mu g/m^3$)	Hazard Quotient
Annual	2001	0.037	255772	3328667	0.05	0.74
	2002	0.038	255772	3328763		0.76
	2003	0.040	256300	3329667		0.80
	2004	0.036	256300	3329667		0.72
	2005	0.034	256548	3328151		0.68

[a] UTM coordinates in Zone 17

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



LEGEND

- Source Location
- Buildings Used in Downwash
- Property Boundary

PROPERTY BOUNDARY

REFERENCE

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

40 0 40
Meters

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

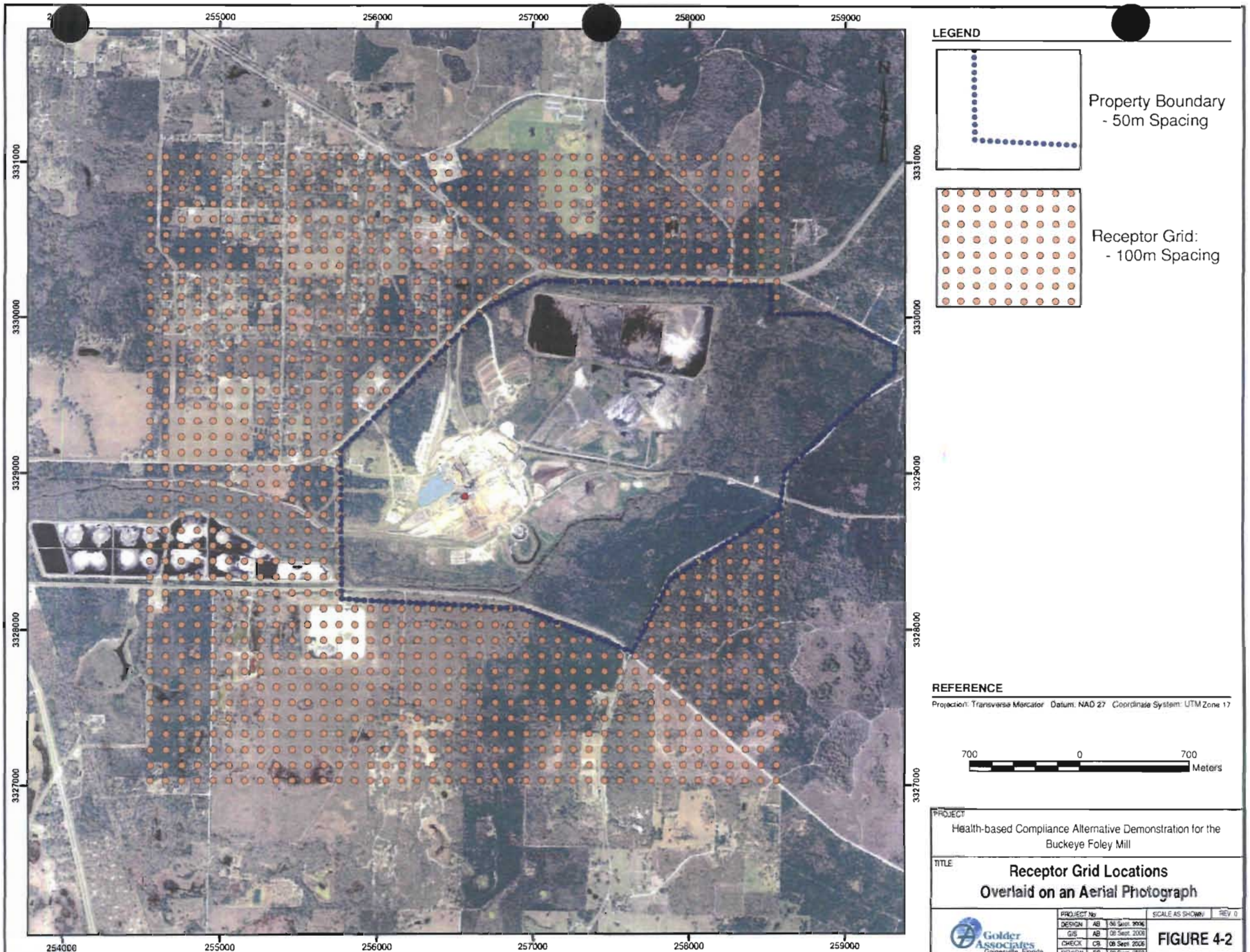
TITLE
Source and Building Locations

PROJECT No.			SCALE AS SHOWN	REV 0
DESIGN	AB	06 Sept. 2006		
GIS	AB	06 Sept. 2006		
CHECK	CB	06 Sept. 2006		
REVIEW	DS	06 Sept. 2006		

Golder Associates Gainesville, Florida

FIGURE 4-1

0637560/HBCA/4.4/Figure 4-1.pdf



PROJECT

Health-based Compliance Alternative Demonstration for the Buckeye Foley Mill

TITLE

Receptor Grid Locations Overlaid on an Aerial Photograph

Golder Associates
Gainesville, Florida

PROJECT No.			SCALE AS SHOWN	REV. 0
DESIGN	AB	08 Sept. 2008		
GIS	AB	08 Sept. 2008		
CHECK	CS	08 Sept. 2008		
REVIEW	SB	08 Sept. 2008		

FIGURE 4-2

0637560/HBCA/4.4/Figure 4-2.pdf

5.0 TITLE V PERMIT PARAMETERS

To be eligible for either health-based compliance alternative, the parameters that define the affected source as eligible for the health-based compliance alternative must be submitted to the permitting authority for incorporation into the Title V permit, as federally enforceable limits. These parameters include, fuel type, fuel mix (annual average), emission rate, type of control devices, process parameters (e.g., maximum heat input), and non-process parameters. The parameters that BKI proposes to be incorporated into the Title V permit are listed in Table 5-1.

TABLE 5-1
TITLE V PERMIT LIMITS FOR SUBPART DDDDD SOURCES,
BUCKEYE FLORIDA, FOLEY MILL

Unit	Process Parameter	Limit	Units	Averaging Time
No. 1 Bark Boiler	Maximum Heat Input	300	MMBtu/hr	24-hr
	Mn Emissions	6.10E-03	lb/MMBtu	--
No. 2 Bark Boiler	Maximum Heat Input	601	MMBtu/hr	24-hr
	Mn Emissions	6.10E-03	lb/MMBtu	--

APPENDIX A

FUEL ANALYSES

TABLE A-1
BARK/WOODWASTE FUEL ANALYSIS FROM BUCKEYE FLORIDA, FOLEY MILL

Parameter	Units	8/2/2006 C-1	8/3/2006 C-2	8/4/2006 C-3	Range [a] Minimum	Range [a] Maximum	Average [a]	Standard Deviation [a]	90% Confidence Level [b]
HHV	Btu/lb, dry basis	8,600	8,000	8,100	8,000	8,600	8,233	--	
Total Solids	%, wet basis	61.7	60.4	57.5	57.5	61.7	59.9	--	
Moisture	%	38.3	39.6	42.5	38.3	42.5	40.1	--	
Chloride	ppm, dry basis	110	130	96	96	130	112	17.1	
Chloride	lb/MMBtu	0.013	0.016	0.012	0.012	0.016	0.014	0.002	**0.018**
								n = 3	
								t = 1.885618	
Hydrogen Chloride	ppm, dry basis	113.1	133.6	98.7	99	134	115	17.6	
Hydrogen Chloride	lb/MMBtu	0.013	0.017	0.012	0.012	0.017	0.014	0.002	**0.019**
								n = 3	
								t = 1.885618	
Mercury	ppm, dry basis	< 0.011	< 0.011	< 0.013	5.5E-03	6.5E-03	5.8E-03	5.8E-04	
Mercury	lb/MMBtu	< 1.3E-09	< 1.4E-09	< 1.6E-09	6.4E-10	8.0E-10	7.1E-10	8.4E-11	**8.68E-10**
								n = 3	
								t = 1.885618	
Arsenic	ppm, dry basis	0.96	0.60	0.66	0.60	0.96	0.74	--	
Arsenic	lb/MMBtu	1.1E-04	7.5E-05	8.1E-05	7.5E-05	1.1E-04	8.9E-05	--	
Beryllium	ppm, dry basis	< 0.012	< 0.012	< 0.020	0.006	0.010	0.007	--	
Beryllium	lb/MMBtu	< 1.4E-06	< 1.5E-06	< 2.5E-06	7.0E-07	1.2E-06	8.9E-07	--	
Cadmium	ppm, dry basis	0.088	< 0.035	< 0.056	0.018	0.088	0.045	--	
Cadmium	lb/MMBtu	1.0E-05	< 4.4E-06	< 6.9E-06	2.2E-06	1.0E-05	5.3E-06	--	
Chromium	ppm, dry basis	1.5	1.2	2.6	1.2	2.6	1.8	--	
Chromium	lb/MMBtu	1.7E-04	1.5E-04	3.2E-04	1.5E-04	3.2E-04	2.2E-04	--	
Lead	ppm, dry basis	0.57	0.44	0.57	0.44	0.57	0.53	--	
Lead	lb/MMBtu	6.6E-05	5.5E-05	7.0E-05	5.5E-05	7.0E-05	6.4E-05	--	
Manganese	ppm, dry basis	51	46	45	45.0	51.0	47.3	--	
Manganese	lb/MMBtu	5.9E-03	5.8E-03	5.6E-03	5.6E-03	5.9E-03	5.7E-03	--	
Nickel	ppm, dry basis	0.57	0.35	1.1	0.35	1.1	0.67	--	
Nickel	lb/MMBtu	6.6E-05	4.4E-05	1.4E-04	4.4E-05	1.4E-04	8.2E-05	--	
Selenium	ppm, dry basis	0.36	0.30	< 0.27	0.14	0.36	0.27	--	
Selenium	lb/MMBtu	4.2E-05	3.8E-05	< 3.3E-05	1.7E-05	4.2E-05	3.2E-05	--	
8-Metals Total	ppm, dry basis	55.1	48.9	50.1	48.9	55.1	51.4	3.3	
8-Metals Total	lb/MMBtu	6.4E-03	6.1E-03	6.2E-03	6.1E-03	6.4E-03	6.2E-03	1.5E-04	**6.52E-03**
								n = 3	
								t = 1.885618	
8-Metals w/o Mn	ppm, dry basis	4.1	2.9	5.1	2.9	5.1	4.0	1.1	
8-Metals w/o Mn	lb/MMBtu	4.7E-04	3.6E-04	6.3E-04	3.6E-04	6.3E-04	4.9E-04	1.3E-04	**7.41E-04**
								n = 3	
								t = 1.885618	
Manganese	ppm, dry basis	51	46	45	45.0	51.0	47.3	3.2	
Manganese	lb/MMBtu	5.9E-03	5.8E-03	5.6E-03	5.6E-03	5.9E-03	5.7E-03	1.9E-04	**6.10E-03**
								n = 3	
								t = 1.885618	

Notes: % = percent
Btu/lb = British thermal unit per pound
HHV = higher heating value
lb/MMBtu = pound per million British thermal units
ppm = parts per milion

[a] For concentrations that are reported as below detection limit the minimum, maximum, average, and standard deviation were calculated by taking one-half of detection limit.

[b] 90% confidence level calculated based on the following equation [40 CFR 63.7530(d)(2)]:

P_{90} = mean + (SD * t); where:
P_{90} = 90% confidence level pollutant concentration (lb/MMBtu)
mean = average of fuel samples analyzed (lb/MMBtu)
SD = standard deviation of pollutant concentrations (lb/MMBtu)
t = t distribution critical value for 90% confidence probability (0.1) for n-1 degrees of freedom
n = number of samples

TABLE A-2
NO. 6 FUEL OIL FUEL ANALYSIS FROM BUCKEYE FLORIDA, FOLEY MILL

Parameter	Units	Analysis Results - Fuel Oil Samples 2/8/2005 1	2/8/2005 2	2/8/2005 3	Range [a] Minimum	Range [a] Maximum	Average [a]	Standard Deviation [a]	90% Confidence Level [b]
HHV	Btu/lb	20,000	19,000	19,000	19,000	20,000	19,333	--	
Mercury	ppm, dry basis	< 0.017	< 0.017	< 0.017	0.0085	0.0085	0.0085	0	
Mercury	lb/MMBtu	< 8.5E-07	< 8.9E-07	< 8.9E-07	4.3E-07	4.5E-07	4.4E-07	1.3E-08	**4.6E-07**
								n = 3	
								t = 1.885618	
Arsenic	ppm, dry basis	0.30	0.37	0.18	0.18	0.37	0.28	--	
Arsenic	lb/MMBtu	1.5E-05	1.9E-05	9.5E-06	9.5E-06	1.9E-05	1.5E-05	--	
Beryllium	ppm, dry basis	< 0.060	< 0.060	< 0.060	0.030	0.030	0.030	--	
Beryllium	lb/MMBtu	< 3.0E-06	< 3.2E-06	< 3.2E-06	1.5E-06	1.6E-06	1.6E-06	--	
Cadmium	ppm, dry basis	< 0.060	< 0.060	< 0.060	0.030	0.030	0.030	--	
Cadmium	lb/MMBtu	< 3.0E-06	< 3.2E-06	< 3.2E-06	1.5E-06	1.6E-06	1.6E-06	--	
Chromium	ppm, dry basis	< 0.14	< 0.14	< 0.14	0.070	0.070	0.070	--	
Chromium	lb/MMBtu	< 7.0E-06	< 7.4E-06	< 7.4E-06	3.5E-06	3.7E-06	3.6E-06	--	
Lead	ppm, dry basis	0.26	< 0.28	< 0.28	0.140	0.260	0.180	--	
Lead	lb/MMBtu	1.3E-05	< 1.5E-05	< 1.5E-05	7.4E-06	1.3E-05	9.2E-06	--	
Manganese	ppm, dry basis	< 0.15	< 0.15	< 0.15	0.075	0.075	0.075	--	
Manganese	lb/MMBtu	< 7.5E-06	< 7.9E-06	< 7.9E-06	3.8E-06	3.9E-06	3.9E-06	--	
Nickel	ppm, dry basis	2.0	0.99	1.1	0.99	2.00	1.36	--	
Nickel	lb/MMBtu	1.0E-04	5.2E-05	5.8E-05	5.2E-05	1.0E-04	7.0E-05	--	
Selenium	ppm, dry basis	< 0.49	< 0.49	< 0.49	0.245	0.245	0.245	--	
Selenium	lb/MMBtu	< 2.5E-05	< 2.6E-05	< 2.6E-05	1.2E-05	1.3E-05	1.3E-05	--	
8-Metals Total	ppm, dry basis	3.01	1.95	1.87	1.87	3.01	2.28	0.64	
8-Metals Total	lb/MMBtu	1.5E-04	1.0E-04	9.8E-05	9.8E-05	1.5E-04	1.2E-04	2.9E-05	**1.7E-04**
								n = 3	
								t = 1.885618	
8-Metals w/o Mn	ppm, dry basis	2.86	1.8	1.72	1.72	2.86	2.13	0.64	
8-Metals w/o Mn	lb/MMBtu	1.4E-04	9.5E-05	9.1E-05	9.1E-05	1.4E-04	1.1E-04	2.9E-05	**1.6E-04**
								n = 3	
								t = 1.885618	
Manganese	ppm, dry basis	< 0.15	< 0.15	< 0.15	0.075	0.075	0.075	0.00	
Manganese	lb/MMBtu	< 7.5E-06	< 7.9E-06	< 7.9E-06	3.8E-06	3.9E-06	3.9E-06	2.3E-07	**4.3E-06**
								n = 3	
								t = 1.885618	

Notes:

ppm = parts per million

lb/MMBtu = pounds per million British thermal units

HHV = Higher heating value

[a] For concentrations that are reported as below detection limit the minimum, maximum, average, and standard deviation were calculated by taking one-half of detection limit.

[b] 90% confidence level calculated based on the following equation [40 CFR 63.7530(d)(2)]:

P_{90} = mean + (SD * t); where:

P_{90} = 90% confidence level pollutant concentration (lb/MMBtu)

mean = average of fuel samples analyzed (lb/MMBtu)

SD = standard deviation of pollutant concentrations (lb/MMBtu)

t = t distribution critical value for 90% confidence probability (0.1) for *n*-1 degrees of freedom

n = number of samples

TABLE A-3
TALL OIL FUEL ANALYSIS, BUCKEYE FLORIDA, FOLEY MILL

Parameter	Units	Sample Analysis
Specific Gravity [a]	--	0.95-1.0
Density [a]	lb/gal	7.9
HHV [b]	Btu/lb Btu/gal	18,000 142,200
Total Nitrogen [b]	mg/kg	<55
Total Chlorides [b]	ppm	<10
Sulfur [b]	(%)	0.053
Arsenic [b]	ppm	<1.6
Cadmium [b]	ppm	<0.50
Chromium [b]	ppm	<1
Copper [b]	ppm	<2
Lead [b]	ppm	<0.50
Manganese [c]	ppm	<7.9E-06

Notes:

Values with a less than sign were undetectable; the detection limits are shov

ppm = parts per million

HHV = higher heating value

[a] Based on Tall Oil material safety data sheet (MSDS) - CAS No. 8002-26-4.

[b] Source: Analytical Report, Severn Trent Laboratories Inc., 2003. One tall oil sample was analyzed.

[c] It is assumed that the amount of manganese in tall oil is equal to or less than the amount of manganese in No. 6 fuel oil.

TABLE A-4
BOILER MACT FINAL RULE ANALYTICAL PROCEDURES, BUCKEYE FLORIDA, FOLEY MILL

Rule Citation	40 CFR 63 Subpart DDDDD Boiler MACT Requirement
Table 6	**Analytical Procedures:**
	1. Collect fuel samples--63.7521(c) or ASTM D6323-98 (2003) or equivalent
	2. Composite fuel samples--63.7521(d) or equivalent
	3. Prepare composited fuel samples--SW846-3050B or ASTM D5198-92 (2003) or equivalent
	4. Determine heat content of fuel type--ASTM E711-87 (1996) or equivalent
	5. Determine moisture content of fuel type--ASTM D3173-02 or ASTM E871-82 (1998) or equivalent
	6. Measure pollutant concentration in fuel sample:
	--Mercury--SW-846-7471A
	--Total selected metals--ASTM E885-88 (1996)
	--Chlorine--SW-846-9250 or ASTM E776-87 (1996) or equivalent

TABLE A-5
COMPARISON OF BKI FUEL SAMPLING AND ANAYSIS PRCEDURES WITH FINAL BOILER MACT RULE,
BUCKEYE FLORIDA, FOLEY MILL

Rule Citation	Boiler MACT Rule Requirement	Buckeye's Procedures/Methods
	BARK FUEL SAMPLING PROCEDURES	
63.7521(c)	**Must obtain at least 3 composite samples of each fuel type, following these procedures for a fuel pile or truck:**	Collect three (3) composite samples from the fuel pile.
	1. For each composite sample, select a minimum of five sampling locations uniformly spaced over the surface of the pile.	Consistent with rule.
	2. At each sampling site, dig into the pile to a depth of 18 inches. Insert a clean flat square shovel inot the hole and withdraw a sample, making sure that large pieces do not fall off during sampling.	Consistent with rule.
	3. Transfer all samples to a clean plastic bag.	Consistent with rule.
63.7521(d)	**Prepare each composite sample according to these procedures:**	
	1. Thoroughly mix and pour entire composite sample over a clean plastic sheet.	Consistent with rule.
	2. Break sample pieces over 3 inches into smaller sizes.	Not necessary since bark has already been sized in the woodyard.
	3. Make a pie shape with entire composite sample and subdivide it into 4 equal parts.	Consistent with rule.
	4. Separate one of 1/4 samples as first subset.	Consistent with rule.
	5. If subset is too large for grinding, repeat step #3.	Not applicable.
	6. Grind sample in a mill.	Will not grind the samples, since not necessary due to particle size of bark fuel. Lab will cut the samples prior to digestion as necessary.
	7. Use step #3 to obtain a 1/4 subsample for analysis.	Consistent with rule.
	8. If 1/4 sample is too large, subdivide it further using same procedure.	Consistent with rule.
63.7521(e)	**Determine pollutant (Hg, HCl, and/or TSM) concentrations in fuel in lb/MMBtu of each composite sample.**	Proximate, ultimate, heat content, metals, and chlorine analyses will be performed. All pollutants will be calculated in lb/MMBtu based on heat content.
	BARK FUEL ANALYTICAL PROCEDURES	
Table 6	1. Collect fuel samples--63.7521(c) or ASTM D6323-98 (2003) or equivalent	Consistent with rule.
	2. Composite fuel samples--63.7521(d) or equivalent	see above for differences in procedure
	3. Prepare composited fuel samples--SW846-3050B or ASTM D5198-92 (2003) or equivalent	SW846-3050B
	4. Determine heat content of fuel type--ASTM E711-87 or equivalent	ASTM D240-87. Equivalent method.
	5. Determine moisture content of fuel type--ASTM D3173-02 or ASTM E871 or equivalent	EPA 160.3 is used to determine total percent solids. The moisture content is based on subtracting the total percent solids from 100%.
	6. Measure pollutant concentration in fuel sample:	
	--Mercury--SW-846-7471A	SW846-7471A (0.01 to 0.02 ppm, dry, minimum detection limit)
	--Total selected metals--ASTM E885-88 (1996)	SW-846-6010B. Both SW846-6010B and ASTM E885-88 are ICP methods, but may use different equipment. SW-846-6010B is the industry standard, yields faster results, and has lower detection limits. In addition, this method is specificed in the rule for coal, and as such should be acceptable for bark.
	--Hydrogen chloride (Chlorine)--SW-846-9250 or ASTM E776-87 (1996) or equivalent	SW-846-9056. Equivalent method.
	7. Convert concentrations into units of lbs pollutant/MMBtu of heat content	Converted using concentrations in ppm and heat content.

SEVERN TRENT STL

ANALYTICAL REPORT

Job Number: 640-7853-1

Job Description: Boiler MACT

For:
Buckeye Florida LP
1 Buckeye Drive
Perry, FL 32348-7702

Attention: Mr. Dave Weeden

Chad A. Bechtold

Chad Bechtold
Project Manager I
cbechtold@stl-inc.com
08/29/2006

Project Manager: Chad Bechtold

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.
Measurement uncertainty data, as referenced in Section 8.6 of the STL Tallahassee LQM, are available upon request.

STL Mobile Florida Department of Health Certification No. E87089

ACCREDITED IN ACCORDANCE WITH nelac

EXECUTIVE SUMMARY - Detections

Client: Buckeye Florida LP

Job Number: 640-7853-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
640-7853-1	**BARK/WOODWASTE 2AUG**					
Arsenic		0.96		0.65	mg/Kg	6010B
Cadmium		0.088	I	0.33	mg/Kg	6010B
Chromium		1.5	V	0.65	mg/Kg	6010B
Manganese		51	V	0.65	mg/Kg	6010B
Nickel		0.57	I	2.6	mg/Kg	6010B
Lead		0.57		0.33	mg/Kg	6010B
Selenium		0.36	I	0.65	mg/Kg	6010B
Chloride		110		0.092	mg/Kg	9056
BTU		8600		100	BTU/lb	D240-87
Percent Solids		62		0.10	%	PercentMoisture
640-7853-2	**BARK/WOODWASTE 3AUG**					
Arsenic		0.60	I V	0.67	mg/Kg	6010B
Chromium		1.2	V	0.67	mg/Kg	6010B
Manganese		46	V	0.67	mg/Kg	6010B
Nickel		0.35	I	2.7	mg/Kg	6010B
Lead		0.44		0.34	mg/Kg	6010B
Selenium		0.30	I	0.67	mg/Kg	6010B
Chloride		130		0.086	mg/Kg	9056
BTU		8000		100	BTU/lb	D240-87
Percent Solids		60		0.10	%	PercentMoisture
640-7853-3	**BARK/WOODWASTE 4AUG**					
Arsenic		0.66	I V	1.1	mg/Kg	6010B
Chromium		2.6	V	1.1	mg/Kg	6010B
Manganese		45	V	1.1	mg/Kg	6010B
Nickel		1.1	I	4.3	mg/Kg	6010B
Lead		0.57		0.54	mg/Kg	6010B
Chloride		96		0.11	mg/Kg	9056
BTU		8100		100	BTU/lb	D240-87
Percent Solids		58		0.10	%	PercentMoisture

$\frac{\text{Kg}}{10^6\,\text{mg}}$ $51\,\frac{\text{mg}}{\text{Kg}}$ $\frac{1}{8600}$ $\frac{\text{lb}}{\text{Btu}}$

5.75×10^{-3}

47.333

METHOD SUMMARY

Client: Buckeye Florida LP

Job Number: 640-7853-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Inductively Coupled Plasma - Atomic Emission Spectrometry	STL MOB	SW846 6010B	
Acid Digestion of Sediments, Sludges, and Soils	STL MOB		SW846 3050B
Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	STL MOB	SW846 7471A	
Mercury in Solid or Semi-Solid Waste (Manual	STL MOB		SW846 7471A
Total Halogens(Bomb Calorimeter followed by IC)	STL MOB	SW846 9056	
Bomb Preparation Method for Solid Waste	STL MOB		SW846 5050
Std Test Mthd - Heat of Combustion of Liq Hydrocarbon Fuels by Bomb Calorimeter	STL MOB	ASTM D240-87	
BTU Prep (Parr Bomb)	STL MOB		ASTM D240-87
Percent Moisture	STL MOB	EPA 160.3	

LAB REFERENCES:

STL MOB = STL Mobile

METHOD REFERENCES:

EPA - US Environmental Protection Agency

SW846 - "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

SAMPLE SUMMARY

Client: Buckeye Florida LP

Job Number: 640-7853-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
640-7853-1	Bark/woodwaste 2aug	Solid	08/02/2006 0830	08/04/2006 1645
640-7853-2	Bark/woodwaste 3aug	Solid	08/03/2006 0830	08/04/2006 1645
640-7853-3	Bark/woodwaste 4aug	Solid	08/04/2006 0830	08/04/2006 1645

SAMPLE RESULTS

Client: Buckeye Florida LP

Job Number: 640-7853-1

Client Sample ID: Bark/woodwaste 2aug

Lab Sample ID: 640-7853-1
Client Matrix: Solid
% Moisture: 38.3
Date Sampled: 08/02/2006 0830
Date Received: 08/04/2006 1645

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 08/11/2006 0016
Date Prepared: 08/08/2006 1154
Analysis Batch: 700-24492
Prep Batch: 700-24339
Instrument ID: TJA ICP TRACE
Lab File ID: AUG1106
Initial Weight/Volume: 1.24 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
Cadmium		0.088	I	0.034	0.33
Chromium		1.5	V	0.042	0.65
Manganese		51	V	0.11	0.65
Nickel		0.57	I	0.085	2.6
Lead		0.57		0.12	0.33
Selenium		0.36	I	0.16	0.65

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 08/15/2006 1338
Date Prepared: 08/08/2006 1154
Analysis Batch: 700-24643
Prep Batch: 700-24339
Instrument ID: TJA ICP TRACE
Lab File ID: AUG1506
Initial Weight/Volume: 1.24 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
Beryllium		0.012	U	0.012	0.26

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 08/15/2006 1342
Date Prepared: 08/08/2006 1154
Analysis Batch: 700-24643
Prep Batch: 700-24339
Instrument ID: TJA ICP TRACE
Lab File ID: AUG1506
Initial Weight/Volume: 1.24 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
Arsenic		0.96		0.32	0.65

Client: Buckeye Florida LP

Job Number: 640-7853-1

Client Sample ID: Bark/woodwaste 2aug

Lab Sample ID:	640-7853-1		Date Sampled: 08/02/2006 0830
Client Matrix:	Solid	% Moisture: 38.3	Date Received: 08/04/2006 1645

7471A Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Method:	7471A	Analysis Batch: 700-24500	Instrument ID: LEEMAN PS200
Preparation:	7471A	Prep Batch: 700-24392	Lab File ID: N/A
Dilution:	1.0		Initial Weight/Volume: 0.58 g
Date Analyzed:	08/10/2006 1613		Final Weight/Volume: 40 mL
Date Prepared:	08/09/2006 1220		

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
Mercury		0.011	U	0.011	0.022

Client: Buckeye Florida LP

Job Number: 640-7853-1

Client Sample ID: Bark/woodwaste 3aug

Lab Sample ID: 640-7853-2
Client Matrix: Solid
% Moisture: 39.6
Date Sampled: 08/03/2006 0830
Date Received: 08/04/2006 1645

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 08/11/2006 0023
Date Prepared: 08/08/2006 1154
Analysis Batch: 700-24492
Prep Batch: 700-24339
Instrument ID: TJA ICP TRACE
Lab File ID: AUG1106
Initial Weight/Volume: 1.23 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
Cadmium		0.035	U	0.035	0.34
Chromium		1.2	V	0.044	0.67
Manganese		46	V	0.12	0.67
Nickel		0.35	I	0.088	2.7
Lead		0.44		0.12	0.34
Selenium		0.30	I	0.17	0.67

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 08/15/2006 1346
Date Prepared: 08/08/2006 1154
Analysis Batch: 700-24643
Prep Batch: 700-24339
Instrument ID: TJA ICP TRACE
Lab File ID: AUG1506
Initial Weight/Volume: 1.23 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
Arsenic		0.60	I V	0.33	0.67
Beryllium		0.012	U	0.012	0.27

7471A Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Method: 7471A
Preparation: 7471A
Dilution: 1.0
Date Analyzed: 08/10/2006 1618
Date Prepared: 08/09/2006 1220
Analysis Batch: 700-24500
Prep Batch: 700-24392
Instrument ID: LEEMAN PS200
Lab File ID: N/A
Initial Weight/Volume: 0.6 g
Final Weight/Volume: 40 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
Mercury		0.011	U	0.011	0.022

Client: Buckeye Florida LP

Job Number: 640-7853-1

Client Sample ID: Bark/woodwaste 4aug

Lab Sample ID: 640-7853-3
Client Matrix: Solid
% Moisture: 42.5
Date Sampled: 08/04/2006 0830
Date Received: 08/04/2006 1645

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 08/11/2006 0051
Date Prepared: 08/08/2006 1154
Analysis Batch: 700-24492
Prep Batch: 700-24339
Instrument ID: TJA ICP TRACE
Lab File ID: AUG1106
Initial Weight/Volume: 0.81 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
Cadmium		0.056	U	0.056	0.54
Chromium		2.6	V	0.069	1.1
Manganese		45	V	0.19	1.1
Nickel		1.1	I	0.14	4.3
Lead		0.57		0.19	0.54
Selenium		0.27	U	0.27	1.1

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 08/15/2006 1350
Date Prepared: 08/08/2006 1154
Analysis Batch: 700-24643
Prep Batch: 700-24339
Instrument ID: TJA ICP TRACE
Lab File ID: AUG1506
Initial Weight/Volume: 0.81 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
Arsenic		0.66	I V	0.52	1.1
Beryllium		0.020	U	0.020	0.43

7471A Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Method: 7471A
Preparation: 7471A
Dilution: 1.0
Date Analyzed: 08/10/2006 1619
Date Prepared: 08/09/2006 1220
Analysis Batch: 700-24500
Prep Batch: 700-24392
Instrument ID: LEEMAN PS200
Lab File ID: N/A
Initial Weight/Volume: 0.53 g
Final Weight/Volume: 40 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	PQL
Mercury		0.013	U	0.013	0.026

General Chemistry

Client Sample ID: **Bark/woodwaste 2aug**

Lab Sample ID: 640-7853-1
Client Matrix: Solid
% Moisture: 38.3
Date Sampled: 08/02/2006 0830
Date Received: 08/04/2006 1645

Analyte	Result	Qual	Units	MDL	PQL	Dil	Method
Chloride	110		mg/Kg	0.092	0.092	1.0	9056
	Anly Batch: 700-24951	Date Analyzed	08/09/2006 1550			DryWt Corrected: Y	
	Prep Batch: 700-24599	Date Prepared:	08/09/2006 1550				

Analyte	Result	Qual	Units	RL	PQL	Dil	Method
BTU	8600		BTU/lb	100	100	1.0	D240-87
	Anly Batch: 700-24587	Date Analyzed	08/09/2006 1530				
	Prep Batch: 700-24573	Date Prepared:	08/09/2006 1237				
Percent Solids	62		%	0.10	0.10	1.0	PercentMoisture
	Anly Batch: 700-24382	Date Analyzed	08/08/2006 1145				

Client Sample ID: **Bark/woodwaste 3aug**

Lab Sample ID: 640-7853-2
Client Matrix: Solid
% Moisture: 39.6
Date Sampled: 08/03/2006 0830
Date Received: 08/04/2006 1645

Analyte	Result	Qual	Units	MDL	PQL	Dil	Method
Chloride	130		mg/Kg	0.086	0.086	1.0	9056
	Anly Batch: 700-24951	Date Analyzed	08/09/2006 1650			DryWt Corrected: Y	
	Prep Batch: 700-24599	Date Prepared:	08/09/2006 1630				

Analyte	Result	Qual	Units	RL	PQL	Dil	Method
BTU	8000		BTU/lb	100	100	1.0	D240-87
	Anly Batch: 700-24587	Date Analyzed	08/09/2006 1650				
	Prep Batch: 700-24573	Date Prepared:	08/09/2006 1237				
Percent Solids	60		%	0.10	0.10	1.0	PercentMoisture
	Anly Batch: 700-24382	Date Analyzed	08/08/2006 1145				

General Chemistry

Client Sample ID: **Bark/woodwaste 4aug**

Lab Sample ID: 640-7853-3
Client Matrix: Solid
% Moisture: 42.5
Date Sampled: 08/04/2006 0830
Date Received: 08/04/2006 1645

Analyte	Result	Qual	Units	MDL	PQL	Dil	Method
Chloride	96		mg/Kg	0.11	0.11	1.0	9056
	Anly Batch: 700-24951	Date Analyzed	08/04/2006 1055			DryWt Corrected: Y	
	Prep Batch: 700-24599	Date Prepared:	08/10/2006 1400				

Analyte	Result	Qual	Units	RL	PQL	Dil	Method
BTU	8100		BTU/lb	100	100	1.0	D240-87
	Anly Batch: 700-24587	Date Analyzed	08/10/2006 1400				
	Prep Batch: 700-24573	Date Prepared:	08/09/2006 1237				
Percent Solids	58		%	0.10	0.10	1.0	PercentMoisture
	Anly Batch: 700-24382	Date Analyzed	08/08/2006 1145				

DATA REPORTING QUALIFIERS

Client: Buckeye Florida LP

Job Number: 640-7853-1

Lab Section	Qualifier	Description
Metals		
	U	Indicates that the compound was analyzed for but not detected.
	V	Indicates the analyte was detected in both the sample and the associated method blank.
	I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

QUALITY CONTROL RESULTS

Client: Buckeye Florida LP

Job Number: 640-7853-1

Method Blank - Batch: 700-24339

Method: 6010B
Preparation: 3050B

Lab Sample ID: MB 700-24339/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 08/10/2006 2319
Date Prepared: 08/08/2006 1154

Analysis Batch: 700-24492
Prep Batch: 700-24339
Units: mg/Kg

Instrument ID: TJA ICP TRACE
Lab File ID: AUG1106
Initial Weight/Volume: 0.5 g
Final Weight/Volume: 50 mL

Analyte	Result	Qual	MDL	PQL
Arsenic	0.97	I	0.49	1.0
Beryllium	0.060	I	0.018	0.40
Cadmium	0.052	U	0.052	0.50
Chromium	0.14	I	0.065	1.0
Manganese	0.60	I	0.17	1.0
Nickel	0.13	U	0.13	4.0
Lead	0.18	U	0.18	0.50
Selenium	0.25	U	0.25	1.0

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 700-24339

Method: 6010B
Preparation: 3050B

LCS Lab Sample ID: LCS 700-24339/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 08/10/2006 2326
Date Prepared: 08/08/2006 1154

Analysis Batch: 700-24492
Prep Batch: 700-24339
Units: mg/Kg

Instrument ID: TJA ICP TRACE
Lab File ID: AUG1106
Initial Weight/Volume: 0.5 g
Final Weight/Volume: 50 mL

LCSD Lab Sample ID: LCSD 700-24339/3-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 08/10/2006 2332
Date Prepared: 08/08/2006 1154

Analysis Batch: 700-24492
Prep Batch: 700-24339
Units: mg/Kg

Instrument ID: TJA ICP TRACE
Lab File ID: AUG1106
Initial Weight/Volume: 0.5 g
Final Weight/Volume: 50 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Arsenic	89	90	75 - 125	1	20		
Beryllium	84	85	75 - 125	1	20		
Cadmium	93	94	75 - 125	1	20		
Chromium	91	91	75 - 125	0	20		
Manganese	92	92	75 - 125	1	20		
Nickel	92	92	75 - 125	1	20		
Lead	88	88	75 - 125	0	20		
Selenium	89	91	75 - 125	2	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Buckeye Florida LP

Job Number: 640-7853-1

Method Blank - Batch: 700-24392

Method: 7471A
Preparation: 7471A

Lab Sample ID: MB 700-24392/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 08/10/2006 1609
Date Prepared: 08/09/2006 1220

Analysis Batch: 700-24500
Prep Batch: 700-24392
Units: mg/Kg

Instrument ID: LEEMAN PS200
Lab File ID: N/A
Initial Weight/Volume: 0.4 g
Final Weight/Volume: 40 mL

Analyte	Result	Qual	MDL	PQL
Mercury	0.010	U	0.010	0.020

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 700-24392

Method: 7471A
Preparation: 7471A

LCS Lab Sample ID: LCS 700-24392/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 08/11/2006 1120
Date Prepared: 08/09/2006 1220

Analysis Batch: 700-24500
Prep Batch: 700-24392
Units: mg/Kg

Instrument ID: LEEMAN PS200
Lab File ID: N/A
Initial Weight/Volume: 0.4 g
Final Weight/Volume: 40 mL

LCSD Lab Sample ID: LCSD 700-24392/3-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 08/11/2006 1123
Date Prepared: 08/09/2006 1220

Analysis Batch: 700-24500
Prep Batch: 700-24392
Units: mg/Kg

Instrument ID: LEEMAN PS200
Lab File ID: N/A
Initial Weight/Volume: 0.4 g
Final Weight/Volume: 40 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Mercury	106	104	80 - 120	2	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

LOGIN SAMPLE RECEIPT CHECK LIST

Client: Buckeye Florida LP

Job Number: 640-7853-1

Login Number: 7853

Question	T/F/NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	NA	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	NA	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	NA	
Samples do not require splitting or compositing.	NA	

SEVERN TRENT STL

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Analytical Report

For: Mr. Dave Weeden
Buckeye Florida LP
1 Buckeye Drive
Perry, FL 32348-7702
CC:

Order Number: T5100541
SDG Number:
Client Project ID:
Project: Paper/Pulp Boiler Study
Report Date: 02/28/2005
Sampled By: Client
Sample Received Date: 02/08/2005
Requisition Number:
Purchase Order: FL-16363-DGS

Laura B. Snead

Laura B. Snead, Project Manager
lsnead@stl-inc.com

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Sample Summary

Order: T5100541
Date Received: 02/08/2005

Client: Buckeye Florida LP
Project: Paper/Pulp Boiler Study

Client Sample ID	Lab Sample ID	Matrix	Date Sampled
Fuel Oil 001	T5100541*1	OIL	02/04/2005 10:00
Fuel Oil 002	T5100541*2	OIL	02/07/2005 10:15
Fuel Oil 003	T5100541*3	OIL	02/08/2005 11:30
Bark 001	T5100541*4	Solid	02/08/2005 13:30
Bark 002	T5100541*5	Solid	02/08/2005 13:30
Bark 003	T5100541*6	Solid	02/08/2005 13:30
Bark 004	T5100541*7	Solid	02/08/2005 13:30
Bark 005	T5100541*8	Solid	02/08/2005 13:30

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
100541-1	Fuel Oil 001	OIL	02/08/05	02/04/05 10:00	
100541-2	Fuel Oil 002	OIL	02/08/05	02/07/05 10:15	
100541-3	Fuel Oil 003	OIL	02/08/05	02/08/05 11:30	

Parameter	Units	Lab Sample IDs 100541-1	100541-2	100541-3
ICP Metals				
Arsenic	mg/kg	0.30I	0.37I	0.18I
Beryllium	mg/kg	0.060U	0.060U	0.060U
Cadmium	mg/kg	0.060U	0.060U	0.060U
Chromium	mg/kg	0.14U	0.14U	0.14U
Lead	mg/kg	0.26I	0.28U	0.28U
Manganese	mg/kg	0.15U	0.15U	0.15U
Nickel	mg/kg	2.0I	0.99I	1.1I
Selenium	mg/kg	0.49U	0.49U	0.49U
Prep Date		02/10/05	02/10/05	02/10/05
Prep Time		11:00	11:00	11:00
Analysis Date		02/11/05	02/11/05	02/11/05
Analyst		HVM	HVM	HVM
Mercury				
Mercury	mg/kg	0.017U	0.017U	0.017U
Prep Date		02/11/05	02/11/05	02/11/05
Prep Time		13:00	13:00	13:00
Analysis Date		02/11/05	02/11/05	02/11/05
Analyst		KH	KH	KH
BTU (ASTM D240-76)				
BTU	BTU/lb	20000	19000	19000
Prep Date		02/13/05	02/13/05	02/13/05
Prep Time		14:00	14:00	14:00
Analysis Date		02/14/05	02/14/05	02/14/05
Analyst		PZ	PZ	PZ

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
100541-4	Bark 001	Solid	02/08/05	02/08/05 13:30	
100541-5	Bark 002	Solid	02/08/05	02/08/05 13:30	
100541-6	Bark 003	Solid	02/08/05	02/08/05 13:30	
100541-7	Bark 004	Solid	02/08/05	02/08/05 13:30	
100541-8	Bark 005	Solid	02/08/05	02/08/05 13:30	

Parameter	Units	Lab Sample IDs 100541-4	100541-5	100541-6	100541-7	100541-8
ICP Metals (6010)						
Arsenic	mg/kg dw	1.1	0.69I	0.28U	0.89	0.91
Beryllium	mg/kg dw	0.11U	0.10U	0.11U	0.16U	0.12I
Cadmium	mg/kg dw	0.11U	0.10U	0.11U	0.16U	0.087U
Chromium	mg/kg dw	0.39I	0.24U	5.3	6.0	1.7
Lead	mg/kg dw	0.53U	0.68I	1.1	1.4	0.89
Manganese	mg/kg dw	55	120	78	62	67
Nickel	mg/kg dw	0.19U	0.33I	2.5I	2.3I	0.43I
Selenium	mg/kg dw	1.5	0.94I	0.93U	1.7I	0.97I
Prep Date		02/10/05	02/10/05	02/10/05	02/10/05	02/10/05
Prep Time		11:00	11:00	11:00	11:00	11:00
Analysis Date		02/11/05	02/11/05	02/11/05	02/11/05	02/11/05
Analyst		HVM	HVM	HVM	HVM	HVM
BTU (D240-87)						
BTU	BTU/lb	*F13	*F13	*F13	*F13	*F13
Prep Date		02/13/05	02/13/05	02/13/05	02/13/05	02/13/05
Prep Time		14:00	14:00	14:00	14:00	14:00
Analysis Date		02/14/05	02/14/05	02/14/05	02/14/05	02/14/05
Analyst		PZ	PZ	PZ	PZ	PZ

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
100541-4	Bark 001	Solid	02/08/05	02/08/05 13:30	
100541-5	Bark 002	Solid	02/08/05	02/08/05 13:30	
100541-6	Bark 003	Solid	02/08/05	02/08/05 13:30	
100541-7	Bark 004	Solid	02/08/05	02/08/05 13:30	
100541-8	Bark 005	Solid	02/08/05	02/08/05 13:30	

		Lab Sample IDs				
Parameter	Units	100541-4	100541-5	100541-6	100541-7	100541-8
Moisture (% Loss on drying @ 105 C) (D2216)						
Moisture (% Loss on drying @ 105 C)	%	54 %	48 %	65 %	68 %	40 %
Prep Date		02/14/05	02/14/05	02/14/05	02/14/05	02/14/05
Prep Time		13:00	13:00	13:00	13:00	13:00
Analysis Date		02/14/05	02/14/05	02/14/05	02/14/05	02/14/05
Analyst		SHN	SHN	SHN	SHN	SHN

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
100541-9	Method Blank	QC-0	02/08/05		
100541-10	Accuracy (%Rec)	QC-0	02/08/05		
100541-11	Precision (%RPD)	QC-0	02/08/05		

Parameter	Units	Lab Sample IDs 100541-9	100541-10	100541-11
ICP Metals				
Arsenic	mg/kg	0.15U	95 %	0 %
Beryllium	mg/kg	0.060U	100 %	0 %
Cadmium	mg/kg	0.060U	94 %	2.1 %
Chromium	mg/kg	0.14U	105 %	0 %
Lead	mg/kg	0.28U	96 %	4.1 %
Manganese	mg/kg	0.15U	102 %	0 %
Nickel	mg/kg	0.10U	98 %	0 %
Selenium	mg/kg	0.49U	90 %	0 %
Prep Date		02/10/05	02/10/05	
Prep Time		11:00	11:00	
Analysis Date		02/11/05	02/11/05	
Analyst		HVM		
Mercury				
Mercury	mg/kg	0.0017U	100 %	0 %
Prep Date		02/11/05	02/11/05	
Prep Time		13:00	13:00	
Analysis Date		02/11/05	02/11/05	
Analyst		KH		
BTU (ASTM D240-76)				
BTU	*	---	86 %	7.0 %
Prep Date			02/13/04	02/13/05
Prep Time			14:00	14:00
Analysis Date			02/14/05	02/14/05

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
100541-9	Method Blank	QC-O	02/08/05		
100541-10	Accuracy (%Rec)	QC-O	02/08/05		
100541-11	Precision (%RPD)	QC-O	02/08/05		

Parameter	Units	Lab Sample IDs 100541-9	100541-10	100541-11
Chloride				
Chloride	mg/kg	96U	120 %	0 %
Prep Date		02/13/05	02/13/05	02/13/05
Prep Time		12:00	12:00	12:00
Analysis Date		02/14/05	02/14/05	02/14/05
Analyst		RR		

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
100541-12	Method Blank	Solid	02/08/05		
100541-13	Accuracy (%Rec)	Solid	02/08/05		
100541-14	Precision (%RPD)	Solid	02/08/05		

Parameter	Units	Lab Sample IDs 100541-12	100541-13	100541-14
ICP Metals (6010)				
Arsenic	mg/kg dw	0.15U	95 %	0 %
Beryllium	mg/kg dw	0.060U	100 %	0 %
Cadmium	mg/kg dw	0.060U	94 %	2.1 %
Chromium	mg/kg dw	0.14U	105 %	0 %
Lead	mg/kg dw	0.28U	96 %	4.1 %
Manganese	mg/kg dw	0.15U	102 %	0 %
Nickel	mg/kg dw	0.10U	98 %	0 %
Selenium	mg/kg dw	0.49U	90 %	0 %
Prep Date		02/10/05	02/10/05	
Prep Time		11:00	11:00	
Analysis Date		02/11/05	02/11/05	
Analyst		HVM		
BTU (D240-87)				
BTU	BTU/lb	---	86 %	7.0 %
Prep Date			02/13/04	02/13/04
Prep Time			14:00	14:00
Analysis Date			02/14/05	02/14/05

Order Number: T5100541

These test results meet all the requirements of NELAC. All questions regarding this report should be directed to the STL Project Manager who signed this test report.

Measurement uncertainty data, as referenced in Section 8.6 of the STL Tallahassee LQM, are available upon request.

Method: EPA SW-846, Update III.
Florida Dept. of Health Certification No.: E81005

BTU, % Moisture, and Chloride were analyzed by:
STL Savannah 5102 LaRoche Ave. Savannah, GA 31404
Florida Dept. of Health Certification No.: E87052

Note: % Moisture analysis was not performed on samples Fuel Oil 001, Fuel Oil 002,and Fuel Oil 003. Method is not applicable for the fuel oil matrix.

*F13 The sample did not ignite; therefore, a heat of combustion value could not be obtained.

U Parameter was analyzed for but not detected. Result reported is the method detection limit.

I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

SEVERN TRENT STL

Analytical Report

Report To: Mr. Dave Weeden
Buckeye Florida LP
1 Buckeye Drive
Perry, FL 32347-9512

Project Number:
Project Name: Tall Oil
STL Log Number: T370325
Report Date: February 6, 2003

Results Pages 1 **through** 5 **(excluding cover page)**

Laura B. Snead

Laura B. Snead, Project Manager
<lsnead@stl-inc.com>

Severn Trent Laboratories, Inc.
STL Tallahassee • 2846 Industrial Plaza Drive, Tallahassee, FL 32301
Tel 850 878 3994 Fax 850 878 9504 • www.stl-inc.com

A part of Severn Trent plc

LOG NO: T3-70325
Received: 27 JAN 03
Reported: 06 FEB 03

Mr. Dave Weeden
Buckeye Florida LP
1 Buckeye Drive
Perry, FL 32347-9512

Client PO. No.: FL-39108-DGS

Project: Tall Oil
Sampled By: Client
Code: 12203026

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , OIL SAMPLES	DATE/ TIME SAMPLED
70325-1	Tall Oil	01-27-03/15:00

PARAMETER	70325-1
BTU (375.4), BTU/lb	18000
Dilution Factor	1
Prep Date	01.30.03
Analysis Date	01.30.03
Batch ID	0130A
Analyst	TH
Total Sulfur (375.4), %	0.053
Dilution Factor	2
Prep Date	01.31.03
Analysis Date	02.03.03
Batch ID	0131A
Analyst	TH
Total Halogens (5050/9056), mg/kg	<200
Dilution Factor	1
Prep Date	01.30.03
Analysis Date	02.05.03
Batch ID	0103A
Analyst	TC

Severn Trent Laboratories, Inc.
STL Tallahassee • 2846 Industrial Plaza Drive, Tallahassee, FL 32301
Tel 850 878 3994 Fax 850 878 9504 • www.stl-inc.com

LOG NO: T3-70325
Received: 27 JAN 03
Reported: 06 FEB 03

Mr. Dave Weeden
Buckeye Florida LP
1 Buckeye Drive
Perry, FL 32347-9512

Client PO. No.: FL-39108-DGS

Project: Tall Oil
Sampled By: Client
Code: 12203026

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , OIL SAMPLES	DATE/ TIME SAMPLED
70325-1	Tall Oil	01-27-03/15:00

PARAMETER	70325-1
Nitrogen, Total (351.2 + 353.2)	
Total Nitrogen, mg/kg	<55
Dilution Factor	1
Prep Date	01.31.03
Analysis Date	02.04.03
Batch ID	0131II
Analyst	DQG
ICP Metals (6010)	
Arsenic, mg/kg	<1.6*F65
Cadmium, mg/kg	<0.50
Chromium, mg/kg	<1.0
Copper, mg/kg	<2.0
Lead, mg/kg	<0.50
Dilution Factor	1
Prep Date	01.29.03
Analysis Date	01.30.03
Batch ID	0129C
Analyst	KCD

LOG NO: T3-70325
Received: 27 JAN 03
Reported: 06 FEB 03

Mr. Dave Weeden
Buckeye Florida LP
1 Buckeye Drive
Perry, FL 32347-9512

Client PO. No.: FL-39108-DGS

Project: Tall Oil
Sampled By: Client
Code: 12243026

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR OIL SAMPLES	DATE/ TIME SAMPLED
70325-2	Method Blank	
70325-3	Accuracy (%Rec)	
70325-4	Precision (%RPD)	

PARAMETER	70325-2	70325-3	70325-4
BTU (375.4)	---	95 %	12 %
Dilution Factor	1	1	---
Prep Date	01.30.03	01.30.03	---
Analysis Date	01.30.03	01.30.03	---
Batch ID	0130A	0130A	0130A
Analyst	TH	TH	---
Total Sulfur (375.4), %	<0.017	104 %	14 %
Dilution Factor	1	1	---
Prep Date	01.31.03	01.31.03	---
Analysis Date	02.03.03	02.03.03	---
Batch ID	0131A	0131A	0131A
Analyst	TH	TH	---
Total Halogens (5050/9056), mg/kg	<200	94 %	---
Dilution Factor	1	1	---
Prep Date	01.30.03	01.30.03	---
Analysis Date	02.05.03	02.05.03	---
Batch ID	0130A	0130A	---
Analyst	TC	TC	---

LOG NO: T3-70325
Received: 27 JAN 03
Reported: 06 FEB 03

Mr. Dave Weeden
Buckeye Florida LP
1 Buckeye Drive
Perry, FL 32347-9512

Client PO. No.: FL-39108-DGS

Project: Tall Oil
Sampled By: Client
Code: 12203026

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR OIL SAMPLES	DATE/ TIME SAMPLED
70325-2	Method Blank	
70325-3	Accuracy (%Rec)	
70325-4	Precision (%RPD)	

PARAMETER	70325-2	70325-3	70325-4
Nitrogen, Total (351.2 + 353.2)			
Total Nitrogen, mg/kg	<55	100 %	2.2 %
Dilution Factor	1	1	---
Prep Date	01.31.03	01.31.03	---
Analysis Date	02.04.03	02.04.03	---
Batch ID	0131II	0131II	0131II
Analyst	DQG	DQG	---
ICP Metals (6010)			
Arsenic, mg/kg	<1.0	95 %	0 %
Cadmium, mg/kg	<0.50	104 %	1.9 %
Chromium, mg/kg	<1.0	105 %	4.6 %
Copper, mg/kg	<2.0	104 %	3.8 %
Lead, mg/kg	<0.50	106 %	1.9 %
Dilution Factor	1	1	---
Prep Date	01.29.03	01.29.03	---
Analysis Date	01.30.03	01.30.03	---
Batch ID	0129C	0129C	0129C
Analyst	KCD	KCD	---

LOG NO: T3-70325
Received: 27 JAN 03
Reported: 06 FEB 03

Mr. Dave Weeden
Buckeye Florida LP
1 Buckeye Drive
Perry, FL 32347-9512

Client PO. No.: FL-39108-DGS

Project: Tall Oil
Sampled By: Client
Code: 12203026

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR OIL SAMPLES	DATE/ TIME SAMPLED
70325-2	Method Blank	
70325-3	Accuracy (%Rec)	
70325-4	Precision (%RPD)	

PARAMETER	70325-2	70325-3	70325-4

These test results meet all the requirements of NELAC. Any questions regarding this test report should be directed to the STL Project Manager who signed this test.

Methods: EPA 40 CFR Part 136
Methods: EPA SW-846 Update III
Florida Dept. of Health Certification No.E81005
FDEP CompQAP No. 890142G

BTU, Sulfur, and Total Halogens analyses were performed by:

STL Savannah
5102 LaRoche Avenue
Savannah, GA 31404
FL DOH Cert No. E87052

F65 = Elevated detection limits were reported due to sample matrix interference which required sample or extract dilution.

STL

Analytical Report

Report To: Mr. Dave Weeden
Buckeye Florida LP
1 Buckeye Drive
Perry, FL 32347-9512

Project Number:
Project Name: Tall Oil
STL Log Number: T370325A
Report Date: March 19, 2003

Results Pages 1 **through** 3 **(excluding cover page)**

Laura B. Snead, Project Manager
<lsnead@stl-inc.com>

LOG NO: T3-70325A
Received: 27 JAN 03
Reported: 19 MAR 03

Mr. Dave Weeden
Buckeye Florida LP
1 Buckeye Drive
Perry, FL 32347-9512

Client PO. No.: FL-39108-DGS

Project: Tall Oil
Sampled By: Client
Code: 163930319

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , OIL SAMPLES	DATE/ TIME SAMPLED
70325A-1	Tall Oil	01-27-03/15:00

PARAMETER	70325A-1
Ash Residue	
Ash Residue, %	100 %
Dilution Factor	1
Prep Date	03.17.03
Analysis Date	03.17.03
Batch ID	0317TS
Analyst	DWH
Extractable Organic Halogens (600/4-84-008(D)), mg/kg	<10
Dilution Factor	1
Prep Date	03.13.03
Analysis Date	03.13.03
Batch ID	0313Z
Analyst	RD

LOG NO: T3-70325A
Received: 27 JAN 03
Reported: 19 MAR 03

Mr. Dave Weeden
Buckeye Florida LP
1 Buckeye Drive
Perry, FL 32347-9512

Client PO. No.: FL-39108-DGS

Project: Tall Oil
Sampled By: Client
Code: 163930319

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR OIL SAMPLES	DATE/ TIME SAMPLED
70325A-2	Method Blank	
70325A-3	Accuracy (%Rec)	
70325A-4	Precision (%RPD)	

PARAMETER	70325A-2	70325A-3	70325A-4
Ash Residue			
Ash Residue, % (as rec'd)	---	---	0 %*F86
Dilution Factor	---	---	1
Prep Date	---	---	03.17.03
Analysis Date	---	---	03.17.03
Batch ID	---	---	0317TS
Analyst	---	---	DWH
Extractable Organic Halogens (600/4-84-008(D)), mg/kg	<10	109 %	48 %
Dilution Factor	1	1	---
Prep Date	03.13.03	03.13.03	---
Analysis Date	03.13.03	03.13.03	---
Batch ID	0313Z	0313Z	0313Z
Analyst	RD	RD	---

LOG NO: T3-70325A
Received: 27 JAN 03
Reported: 19 MAR 03

Mr. Dave Weeden
Buckeye Florida LP
1 Buckeye Drive
Perry, FL 32347-9512

Client PO. No.: FL-39108-DGS

Project: Tall Oil
Sampled By: Client
Code: 163930319

REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR OIL SAMPLES	DATE/ TIME SAMPLED
70325A-2	Method Blank	
70325A-3	Accuracy (%Rec)	
70325A-4	Precision (%RPD)	

PARAMETER	70325A-2	70325A-3	70325A-4

These test results meet all the requirements of NELAC. Any questions regarding this test report should be directed to the STL Project Manager who signed this test.

Methods: EPA 40 CFR Part 136
Methods: EPA SW-846 Update III
Florida Dept. of Health Certification No.E81005
FDEP CompQAP No. 890142G

Extractable Organic Halogens analysis was performed by:

STL Savannah
5102 LaRoche Avenue
Savannah, GA 31404
FL DOH Cert No. E87052

*F86 Because spikes are not appropriate for this method, reported precision was calculated from duplicate analysis of a sample in the batch.

BUCKEYE

One Buckeye Drive Perry, FL 32348

Phone (850) 584-1121
Emergency (850) 584-1250

DATE: 12/1/88
Revised 3/16/93
Company Name Change

MATERIAL SAFETY DATA SHEET

SECTION I PRODUCT IDENTIFICATION

TRADE NAME	CAS NO.	SYNONYMS
TALL OIL	8002-26-4	Crude Tall Oil, Tall Oil, Tallol, Liquid Rosin

DESCRIPTION
OILY RESINOUS MIXTURE OF ROSIN ACIDS, FATTY ACIDS, STEROLS, HIGH MOLECULAR WEIGHT ALCOHOLS, UNSAPONIFIABLE MATTER, COLORED AND ODORIFEROUS MATERIAL. THE EXACT NATURE AND PROPORTION OF THE CONSTITUENTS VARIES WIDELY.

SECTION II HAZARDOUS INGREDIENTS

MATERIAL OR COMPONENT	CAS NO.	%	HAZARD DATA
NONE			

SECTION III PHYSICAL DATA

Boiling Point 5MM HG	390 - 450°	Vapor pressure (MM HG)	NOT AVAILABLE
Specific Gravity (H_2O = 1)	0.95 - 1.0	Solubility in h_2o% by wt	NEGLIGIBLE
VAPOR DENSITY (AIR = 1)	NOT AVAILABLE	Evaporation rate (butyl acetate = 1)	APPROXIMATELY 0
%VOLATILES BY VOLUME	APPROX. 0	pH	TYPICAL RANGE 5-7
APPEARANCE AND ODOR	Dark brown liquid with a pungent odor.		

SECTION IV FIRE AND EXPLOSION DATA

FLASHPOINT (TEST METHOD)	380 - 420 ° F (OPEN CUP)	FLAMMABLE LIMITS IN AIR,% BY VOLUME	NOT AVAILABLE
EXTINGUISHING MEDIA	Dry chemical, carbon dioxide, foam		
SPECIAL FIRE FIGHTING PROCEDURES	None		
UNUSUAL FORE OR EXPLOSION HAZARD	Emits acrid smoke and vapors		

SECTION V HEALTH AND SAFETY DATA

THRESHOLD LIMIT VALUE	None Established
EFFECTS OF OVEREXPOSURE	Prolonged contact can cause serious burns. Repeated brief contact can cause cracking, peeling and blistering of the skin and may cause skin allergy. Can cause serious damage to mouth, throat and stomach if accidentally ingested.
EMERGENCY AND FIRST AID PROCEDURES	
EYES:	Flush with water for 15 minutes, get medical attention
SKIN:	Wash with water and soap.
INHALATION:	Remove to fresh air and get medical attention.
INGESTION:	Do not induce vomiting. Rinse mouth with water. Drink large amounts of water. Get prompt medical attention.

SECTION VI REACTIVITY DATA

STABILITY	STABLE	X	CONDITIONS TO AVOID	NOT APPLICABLE	
	UNSTABLE				
INCOMPATIBILITY (Materials to avoid)			Avoid concentrated acids and strong oxidizing agents		
HAZARDOUS DEOMPOSITION PRODUCTS			Thermal decomposition in the absence of oxygen may product carbon monoxide.		
HAZARDOUS POLYMERIZATION		MAY OCCUR		CONDITIONS TO AVOID	NOT APPLICABLE
		WILL NOT OCCUR	X		

SECTION VII DISPOSAL, SPILL OR LEAK PROCEDURES

WASTE DISPOSAL METHOD	Incinerate or dispose of according to local, state, and federal regulations.
STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED	Contain spills. Pump large spills into appropriate container for future use. Absorb small spills in an absorbent material and dispose as waste. Report as required to the National Emergency Response Center.

SECTION VIII SPECIAL PROTECTION INFORMATION

VENTILLATION REQUIREMENTS		No special requirements.	
SPECIFIC PERSONAL PROTECTIVE RESPIRATORY EQUIPMENT (SPECIFIY IN DETAIL)		None required under normal conditions of handling.	
EYE	Chemical goggles	GLOVES	Impervious gloves
OTHER CLOTHING AND EQUIPMENT:	Aprons, boots, a rubber suit and face shield may be needed when handling large amounts of this material where splash potential exists or the material is at a high temperature. Eyewash fountain and safety shower.		

SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HADLING AND STORING:	Avoid eye and skin contact. Provide adequate spill protection.
OTHER PRECAUTIONS	Consult plant Environmental Control Department regarding waste disposal and spills.

APPENDIX B

MODEL INPUT/OUTPUT DATA

APPENDIX C

TITLE V APPLICATION REVISION PAGES

Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for an air construction permit at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air permit. Also use this form to apply for an air construction permit:

- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment area (NAA) new source review, or maximum achievable control technology (MACT) review; or
- Where the applicant proposes to assume a restriction on the potential emissions of one or more pollutants to escape a federal program requirement such as PSD review, NAA new source review, Title V, or MACT; or
- Where the applicant proposes to establish, revise, or renew a plantwide applicability limit (PAL).

Air Operation Permit – Use this form to apply for:

- An initial federally enforceable state air operation permit (FESOP); or
- An initial/revised/renewal Title V air operation permit.

Air Construction Permit & Title V Air Operation Permit (Concurrent Processing Option) – Use this form to apply for both an air construction permit and a revised or renewal Title V air operation permit incorporating the proposed project.

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: **Buckeye Florida, Limited Partnership**
2. Site Name: **Foley Mill**
3. Facility Identification Number: **1230001**
4. Facility Location...:
   Street Address or Other Locator: **One Buckeye Drive**
   City: **Perry** County: **FL** Zip Code: **32348**
5. Relocatable Facility? ☐ Yes ☒ No
6. Existing Title V Permitted Facility? ☒ Yes ☐ No

Application Contact

1. Application Contact Name: **David Weeden, Environmental Program Manager**
2. Application Contact Mailing Address...
   Organization/Firm: **Buckey Florida, Limited Partnership**
   Street Address: **One Buckeye Drive**
   City: **Perry** State: **FL** Zip Code: **32348**
3. Application Contact Telephone Numbers...
   Telephone: **(850) 584-1398** ext. Fax: **(850) 584-1220**
4. Application Contact Email Address: **Dave_Weeden@BKITECH.COM**

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	3. PSD Number (if applicable):
2. Project Number(s):	4. Siting Number (if applicable):

APPLICATION INFORMATION

Purpose of Application

This application for air permit is submitted to obtain: (Check one)

Air Construction Permit

☐ Air construction permit.
☐ Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).
☐ Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.

Air Operation Permit

☐ Initial Title V air operation permit.
☒ Title V air operation permit revision.
☐ Title V air operation permit renewal.
☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.
☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)

☐ Air construction permit and Title V permit revision, incorporating the proposed project.
☐ Air construction permit and Title V permit renewal, incorporating the proposed project.

Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:

☐ I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

This application is to incorporate into the Title V permit the controlling process parameters used in the health-based compliance alternative (HBCA) under 40 CFR 63, Subpart DDDDD.

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee
004	No. 1 Bark Boiler	AV05	N/A
019	No. 2 Bark Boiler	AV05	N/A

Application Processing Fee

Check one: ☐ Attached - Amount: $_____ ☒ Not Applicable

APPLICATION INFORMATION

Owner/Authorized Representative Statement

Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name :

2. Owner/Authorized Representative Mailing Address...
   Organization/Firm:
   Street Address:
   City: State: Zip Code:

3. Owner/Authorized Representative Telephone Numbers...
   Telephone: ( ) - ext. Fax: ( ) -

4. Owner/Authorized Representative Email Address:

5. Owner/Authorized Representative Statement:

   I, the undersigned, am the owner or authorized representative of the facility 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 requirements identified in this application to which the facility 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.

   _____ _____
   Signature Date

Application Responsible Official Certification

Complete if applying for an initial/revised/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:
   Howard A. Drew, V.P., Wood Cellulose Manufacturing

2. Application Responsible Official Qualification (Check one or more of the following options, as applicable):
   - ☒ 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.
   - ☐ For a partnership or sole proprietorship, a general partner or the proprietor, respectively.
   - ☐ For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.
   - ☐ The designated representative at an Acid Rain source.

3. Application Responsible Official Mailing Address...
   Organization/Firm: **Buckeye Florida, Limited Partnership**
   Street Address: **One Buckeye Drive**
   City: **Perry** State: **FL** Zip Code: **32348**

4. Application Responsible Official Telephone Numbers...
   Telephone: **(850) 584-1656** ext. Fax: **(850) 584-1722**

5. Application Responsible Official Email Address: **howard_drew@BKITECH.com**

6. Application Responsible Official Certification:
   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.

   Signature 9/8/06 Date

APPLICATION INFORMATION

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 23rd 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

9/13/06
Date

(seal)

* Attach any exception to certification statement.
** Board of Professional Engineers Certificate of Authorization #00001670

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates... Zone **17** East (km) **256.7** North (km) **3328.7**		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) **30 / 03 / 59** Longitude (DD/MM/SS) **83 / 33 / 12**	
3. Governmental Facility Code: **0**	4. Facility Status Code: **A**	5. Facility Major Group SIC Code: **26**	6. Facility SIC(s): **2611**
7. Facility Comment : **This facility is in the dissolving kraft and bleached paper grade subcategories of the pulp and paper industry.**			

Facility Contact

1. Facility Contact Name: **David Weeden, Environmental Program Manager**
2. Facility Contact Mailing Address... Organization/Firm: **Buckeye Florida, Limited Partnership** Street Address: **One Buckeye Drive** City: **Perry** State: **FL** Zip Code: **32348**
3. Facility Contact Telephone Numbers: Telephone: **(850) 584-1398** ext. Fax: **(850) 584-1220**
4. Facility Contact Email Address: **Dave_Weeden@BKITECH.com**

Facility Primary Responsible Official

Complete if an "application responsible official" is identified in Section I. that is not the facility "primary responsible official."

1. Facility Primary Responsible Official Name:
2. Facility Primary Responsible Official Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
3. Facility Primary Responsible Official Telephone Numbers... Telephone: ( ) - ext. Fax: ( ) -
4. Facility Primary Responsible Official Email Address:

FACILITY INFORMATION

Facility Regulatory Classifications

Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a "major source" and a "synthetic minor source."

1. ☐ Small Business Stationary Source	☐ Unknown
2. ☐ Synthetic Non-Title V Source	
3. ☒ Title V Source	
4. ☒ Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5. ☐ Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. ☒ Major Source of Hazardous Air Pollutants (HAPs)	
7. ☐ Synthetic Minor Source of HAPs	
8. ☒ One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9. ☐ One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10. ☒ One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. ☐ Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12. Facility Regulatory Classifications Comment:	

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
Particulate Matter – Total (PM)	A	N
Particulate Matter (PM_{10})	A	N
Carbon Monoxide (CO)	A	N
Nitrogen Oxide (NO_X)	A	N
Sulfur Dioxide (SO_2)	A	N
Volatile Organic Compounds (VOC)	A	N
Total Reduced Sulfur (TRS)	A	N
Hazardous Air Pollutants (HAPs)	A	N
Acetaldehyde (H001)	A	N
Chlorine (H038)	B	N
Formaldehyde (H095)	A	N
Hydrochloric Acid (H106)	A	N
Methanol (H115)	A	N
Methyl Chloride (H118)	A	N
Sulfuric Acid Mist (SAM)	A	N
Ammonia (NH_3)	A	N
Manganese Compounds (H113)	A	N
Mercury (H114)	B	N

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps

1. Pollutant Subject to Emissions Cap	2. Facility Wide Cap [Y or N]? (all units)	3. Emissions Unit ID No.s Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap

7. Facility-Wide or Multi-Unit Emissions Cap Comment:

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) ☐ Attached, Document ID: _____ ☒ Previously Submitted, Date: **May 2005**
2. Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) ☐ Attached, Document ID: _____ ☒ Previously Submitted, Date: **May 2005**
3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) ☐ Attached, Document ID: _____ ☒ Previously Submitted, Date: **May 2005**

Additional Requirements for Air Construction Permit Applications

1. Area Map Showing Facility Location: ☐ Attached, Document ID:_____ ☐ Not Applicable (existing permitted facility)
2. Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL): ☐ Attached, Document ID:_____
3. Rule Applicability Analysis: ☐ Attached, Document ID:_____
4. List of Exempt Emissions Units (Rule 62-210.300(3), F.A.C.): ☐ Attached, Document ID:_____ ☐ Not Applicable (no exempt units at facility)
5. Fugitive Emissions Identification: ☐ Attached, Document ID:_____ ☐ Not Applicable
6. Air Quality Analysis (Rule 62-212.400(7), F.A.C.): ☐ Attached, Document ID:_____ ☐ Not Applicable
7. Source Impact Analysis (Rule 62-212.400(5), F.A.C.): ☐ Attached, Document ID:_____ ☐ Not Applicable
8. Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.): ☐ Attached, Document ID:_____ ☐ Not Applicable
9. Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.): ☐ Attached, Document ID:_____ ☐ Not Applicable
10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): ☐ Attached, Document ID:_____ ☐ Not Applicable

Additional Requirements for FESOP Applications

1. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.):
   ☐ Attached, Document ID:____ ☐ Not Applicable (no exempt units at facility)

Additional Requirements for Title V Air Operation Permit Applications

1. List of Insignificant Activities (Required for initial/renewal applications only):
   ☐ Attached, Document ID:____ ☒ Not Applicable (revision application)

2. Identification of Applicable Requirements (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought):
   ☐ Attached, Document ID:____
   ☒ Not Applicable (revision application with no change in applicable requirements)

3. Compliance Report and Plan (Required for all initial/revision/renewal applications):
   ☒ Attached, Document ID: **BFM-FI-CV3**
   Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.

4. List of Equipment/Activities Regulated under Title VI (If applicable, required for initial/renewal applications only):
   ☐ Attached, Document ID:____
   ☐ Equipment/Activities On site but Not Required to be Individually Listed
   ☒ Not Applicable

5. Verification of Risk Management Plan Submission to EPA (If applicable, required for initial/renewal applications only) :
   ☐ Attached, Document ID: ____ ☒ Not Applicable

6. Requested Changes to Current Title V Air Operation Permit:
   ☐ Attached, Document ID: ____ ☒ Not Applicable

Additional Requirements Comment

ATTACHMENT BFM-FI-CV3

COMPLIANCE REPORT AND PLAN

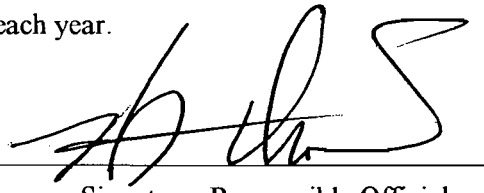
ATTACHMENT BFM-FI-CV3

COMPLIANCE REPORT AND PLAN

Buckeye Florida, L.P., certifies that the Foley Mill, as of the date of this application, is in compliance with each applicable requirement addressed in this Title V air permit application.

I, the undersigned, am the responsible official as defined in Chapter 62-213, F.A.C., of the Title V source for which this report is being submitted. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made and data contained in this report are true, accurate, and complete.

Compliance statements for this facility will be submitted on an annual basis to FDEP, before March 1st of each year.



Signature, Responsible Official

9/08/06

Date

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application for air permit. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised/renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. **The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit.** A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air construction permitting and insignificant emissions units are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

   ☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

   ☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   ☒ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section: **No. 1 Bark Boiler**

3. Emissions Unit Identification Number: **004**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A			**26**	☐ Yes ☒ No

9. Package Unit:
   Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

No. 1 Bark Boiler is a boiler that may be fired with carbonaceous fuel, No. 6 fuel oil, No. 2 fuel oil, facility-generated used oil, tall oil, and natural gas. It serves as the primary combustion device for TRS/NCG gases.

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

Centrifugal collector
Wet venturi scrubber
Gas scrubber, General
Direct Flame Afterburner

2. Control Device or Method Code(s): **008, 053, 013, 021**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: **300** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8,760** hours/year

6. Operating Capacity/Schedule Comment:

NCGs from the Pulping System, Turpentine Recovery System, and the Evaporator System are collected and transported to the No. 1 Bark Boiler for destruction.

Maximum heat input due to fuel oil firing is 240 MMBtu/hr.

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **EP21**	2. Emission Point Type Code: **2**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **225** feet	7. Exit Diameter: **13** feet
8. Exit Temperature: **200** °F	9. Actual Volumetric Flow Rate: **495,073** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	

15. Emission Point Comment:

The acfm and temperature are for combined operation of Nos. 1 and 2 Power Boilers and Nos. 1 and 2 Bark Boilers.

Nos. 1 and 2 Power Boilers: 80,000 acfm and 325 °F.
No. 1 Bark Boiler: 115,073 acfm and 160 °F.
No. 2 Bark Boiler: 220,000 acfm and 150 °F.

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 6

1. Segment Description (Process/Fuel Type): **External Combustion Boilers; Industrial; Wood/Bark Waste; Wood/Bark-Fired Boiler (>50,000 lb steam)**		
2. Source Classification Code (SCC): **1-02-009-02**	3. SCC Units: **Tons Burned**	
4. Maximum Hourly Rate: **37.5**	5. Maximum Annual Rate: **328,500**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash: **1.9**	9. Million Btu per SCC Unit: **8**
10. Segment Comment: **Maximum rates based on 300 MMBtu/hr maximum heat input, 50% moisture, and 4,000 Btu/lb for wood/bark.**		

Segment Description and Rate: Segment 2 of 6

1. Segment Description (Process/Fuel Type): **External Combustion Boilers; Industrial; Residual Oil; Grade 6 Oil**		
2. Source Classification Code (SCC): **1-02-004-01**	3. SCC Units: **1000 Gallons Burned**	
4. Maximum Hourly Rate: **1.644**	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **2.5**	8. Maximum % Ash: **0.1**	9. Million Btu per SCC Unit: **146**
10. Segment Comment: **Residual oil is used during startups, shutdowns, malfunctions, or temporary loss of bark. No. 6 fuel oil may contain tall oil and facility-generated used oil. Maximum hourly rate is based on 240 MMBtu/hr.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 3 of 6

1. Segment Description (Process/Fuel Type): **External Combustion Boilers; Industrial; Distillate Oil; Grades 1 and 2 Oil**		
2. Source Classification Code (SCC): **1-02-005-01**	3. SCC Units: **1000 Gallons Burned**	
4. Maximum Hourly Rate: **1.644**	5. Maximum Annual Rate: **50**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.5**	8. Maximum % Ash:	9. Million Btu per SCC Unit: **136**
10. Segment Comment: **No. 2 fuel oil is fired as a pilot fuel during startups, shutdowns, malfunctions, and for dry out fires after a water wash. Maximum rate is estimated from residual rate.**		

Segment Description and Rate: Segment 4 of 6

1. Segment Description (Process/Fuel Type): **External Combustion Boilers; Industrial; Natural Gas; Over 100 MMBtu/hr**		
2. Source Classification Code (SCC): **1-02-006-01**	3. SCC Units: **Million Cubic Feet Burned**	
4. Maximum Hourly Rate: **0.3**	5. Maximum Annual Rate: **7**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0**	8. Maximum % Ash:	9. Million Btu per SCC Unit: **1,036**
10. Segment Comment: **Natural gas is fired as a pilot fuel during startups, shutdowns, malfunctions, and for dry out fires after a water wash.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 5 of 6

1. Segment Description (Process/Fuel Type): **External Combustion Boilers; Industrial; Liquid Waste; Tall Oil**		
2. Source Classification Code (SCC): **1-02-013-01**	3. SCC Units: **1000 Gallons Burned**	
4. Maximum Hourly Rate: **1.688**	5. Maximum Annual Rate: **5,400**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.05**	8. Maximum % Ash: **0**	9. Million Btu per SCC Unit: **142**
10. Segment Comment: **Facility-generated tall oil blended with No. 6 fuel oil. Maximum hourly rate is based on 240 MMBtu/hr.**		

Segment Description and Rate: Segment 6 of 6

1. Segment Description (Process/Fuel Type): **Industrial Processes; Pulp & Paper and Wood Products; Sulfate (Kraft) Pulping; Low-Volume High Concentration Gas Combustion**		
2. Source Classification Code (SCC): **3-07-001-99**	3. SCC Units: **Air-Dried Tons Unbleached Pulp**	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **This segment used to report emissions from NCG destruction.**		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
CO – Carbon Monoxide			NS
NOx – Nitrogen Oxides			NS
PM – Particulate Matter – Total	008	053	EL
PM10 – Particulate Matter – PM10	008	053	NS
SO2 – Sulfur Dioxide			EL
TRS – Total Reduced Sulfur	013	021	EL
VOC – Volatile Organic Compounds			NS
HAPs – Hazardous Air Pollutants			NS
H095 – Formaldehyde			NS
H106 – Hydrochloric Acid			EL
H113 – Manganese Compounds	008	053	EL
H114 – Mercury	008	053	EL
H115 – Methanol			NS

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **H113 (Manganese Compounds)**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **1.83** lb/hour **8.02** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **6.1×10^{-3} lb/MMBtu** Reference: **Fuel Analysis**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Carbonaceous Fuel Burning:

6.1×10^{-3} lb/MMBtu x 300 MMBtu/hr = 1.83 lb/hr

1.83 lb/hr x 8,760 hr/yr ÷ 2,000 lb/ton = 8.02 TPY

11. Potential Fugitive and Actual Emissions Comment:

Emission factor based on 90 percent confidence level of fuel analysis data.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **9/13/07**
3. Allowable Emissions and Units: **6.10×10^{-3} lb/MMBtu**	4. Equivalent Allowable Emissions: **1.83** lb/hour **8.02** tons/year
5. Method of Compliance: **Fuel Analysis**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on carbonaceous fuel firing only.**	

Allowable Emissions Allowable Emissions of

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **H106 (Hydrochloric Acid)**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **27.0** lb/hour **118.3** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.09 lb/MMBtu** Reference: **40 CFR 63, Subpart DDDDD**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Carbonaceous Fuel Burning:** **0.09 lb/MMBtu x 300 MMBtu/hr = 27.0 lb/hr** **27.0 lb/hr x 8,760 hr/yr ÷ 2,000 lb/ton = 118.3 TPY**	
11. Potential Fugitive and Actual Emissions Comment: **40 CFR 63, Subpart DDDDD**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions: **9/13/07**
3. Allowable Emissions and Units: **0.09 lb/MMBtu**	4. Equivalent Allowable Emissions: **27.0** lb/hour **118.3** tons/year
5. Method of Compliance: **Fuel Analysis**	
6. Allowable Emissions Comment (Description of Operating Method): **40 CFR 63, Subpart DDDDD**	

Allowable Emissions Allowable Emissions of

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **H114 (Mercury)**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.0027** lb/hour **0.012** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **$9x10^{-6}$ lb/MMBtu** Reference: **40 CFR 63, Subpart DDDDD**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Carbonaceous Fuel Burning:** **$9x10^{-6}$ lb/MMBtu x 300 MMBtu/hr = 0.0027 lb/hr** **0.0027 lb/hr x 8,760 hr/yr ÷ 2,000 lb/ton = 0.012 TPY**	
11. Potential Fugitive and Actual Emissions Comment: **40 CFR 63, Subpart DDDDD**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions: **9/13/07**
3. Allowable Emissions and Units: **$9x10^{-6}$ lb/MMBtu**	4. Equivalent Allowable Emissions: **0.0027** lb/hour **0.012** tons/year
5. Method of Compliance: **Fuel Analysis**	
6. Allowable Emissions Comment (Description of Operating Method): **40 CFR 63, Subpart DDDDD**	

Allowable Emissions Allowable Emissions of

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE30**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **30** % Exceptional Conditions: **40** % Maximum Period of Excess Opacity Allowed: **2** min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **Permit No. 1230001-018-AC. VE limit effective only if the VE measurements can be made without being substantially affected by plume mixing or moisture condensation (Rule 62-296.404(2)(b), F.A.C.).**	

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor **1** of **2**

1. Parameter Code: **O2**	2. Pollutant(s):
3. CMS Requirement: **Oxygen**	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **Rosemount O2 Monitor** Model Number: **IFT 3000** Serial Number:	
5. Installation Date: **1/15/99**	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **Rule 62-296.404(5)(c).**	

Continuous Monitoring System: Continuous Monitor **2** of **2**

1. Parameter Code: **TEMP**	2. Pollutant(s):
3. CMS Requirement: **Flue gas temperature**	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **Conax, Honeywell** Model Number: **STT 3000** Serial Number:	
5. Installation Date: **4/1/1989**	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **TRS emissions incineration temperature is continuously monitored and recorded. Rule 62-296.404(5)(c), F.A.C.**	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☒ Previously Submitted, Date **May 2005**

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☒ Previously Submitted, Date **May 2005**

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☒ Previously Submitted, Date **May 2005**

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☒ Previously Submitted, Date **May 2005**
   ☐ Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☐ To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☒ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   ☒ Attached, Document ID: **HBCA Report** ☐ Not Applicable

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: _____ ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☒ Attached, Document ID: **BFM-EU1-IV1** ☐ Not Applicable
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation
   ☒ Attached, Document ID: **BFM-EU1-IV3** ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
      ☐ Copy Attached, Document ID: _____
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☒ Not Applicable

Additional Requirements Comment

ATTACHMENT BFM-EU1-IV1

IDENTIFICATION OF APPLICABLE REQUIREMENTS

ATTACHMENT BFM-EU1-IV1

IDENTIFICATION OF APPLICABLE REQUIREMENTS

No. 1 Bark Boiler

APPLIC STAT	RULE DESCRIP	RULE NUMBER	RULE TITLE	RATIONALE
APPLICABLE	62-296 <	62-296.404(2)(b)	VE/Moisture Interference	
APPLICABLE	62-296 <	62-296.404(3)(a)1	TRS from Digesters, MEEEs, and Condensate Strippers	
APPLICABLE	62-296 <	62-296.404(3)(f)	Other Combustion Devices Used to Incinerate Total Reduced Sulfur Emissions	
APPLICABLE	62-296 <	62-296.404(4)(e)	Test Methods and Procedures – Other Combustion Devices Used to Incinerate Total Reduced Sulfur Emissions	
APPLICABLE	62-296 <	62-296.404(4)(f)	Test Methods and Procedures – Other Combustion Devices Used to Incinerate Total Reduced Sulfur Emissions	
APPLICABLE	62-296 <	62-296.404(5)(c)	Ininerators	
APPLICABLE	62-296 <	62-296.404(5)(d)	Continuous Emission Monitoring Requirement	
APPLICABLE	62-296 <	62-296.404(6)(a)	Quarterly Reporting Requirements	
APPLICABLE	62-296 <	62-296.404(6)(b)	Recordkeeping	
APPLICABLE	62-296 <	62-296.404(6)(c)3	Evaluation of Excess Emissions	
APPLICABLE	62-296 <	62-296.404(6)(c)4	Evaluation of Excess Emissions	
APPLICABLE	62-296 <	62-296.404(6)(d)	Reporting of Excess Emissions	
APPLICABLE	62-296 <	62-296.410(1)(b)	Carbonaceous Fuel Burning Equipment	
APPLICABLE	62-296 <	62-296.410(3)	Test Methods and Procedures	
APPLICABLE	62-297	62-297.310	General Test Requirements	
APPLICABLE	62-297	62-297.401(16)	EPA Methods 16 and 16A – Semicont. Determination Of Sulfur Emissions from Stationary Sources	
APPLICABLE	62-297	62-297.401(5)	EPA Method 5 – Determination of Particulate Emissions from Stationary Sources	
APPLICABLE	62-297	62-297.401(6)	EPA Method 6 – Determination of Sulfur Dioxide Emissions from Stationary Sources	
APPLICABLE	62-297	62-297.401(9)(a)	EPA Method 9 – Visual Determination of the Opacity of Emissions from Stationary Sources	
APPLICABLE	63.443	63.443(d)(4)	MACT Standards – Boilers for HAP Reduction	
APPLICABLE	63.443	63.443(e)	MACT Standards – Excess Emissions	
APPLICABLE	63 Subpart A	40 CFR 63	Subpart A – NESHAPs General Provisions	
APPLICABLE	63 Subpart A	40 CFR 63.1 – 63.16	Subpart A – General Provisions	No. 1 Bark Boiler is subject to the notification requirements of Subpart

ATTACHMENT BFM-EU1-IV1

IDENTIFICATION OF APPLICABLE REQUIREMENTS

No. 1 Bark Boiler

APPLIC STAT	RULE DESCRIP	RULE NUMBER	RULE TITLE	RATIONALE
				DDDDD.
APPLICABLE	63 Subpart DDDDD	40 CFR 63.7485	Subpart DDDDD – Applicability	No. 1 Bark Boiler is an industrial boiler of size > 10 MMBtu/hr located at a major source of HAPs.
APPLICABLE	63 Subpart DDDDD	40 CFR 63.7490	Subpart DDDDD – Applicability	No. 1 Bark Boiler is subject to the requirements of Subpart DDDD for existing boilers.
APPLICABLE	63 Subpart DDDDD	40 CFR 7495	Subpart DDDDD – Compliance Dates	No. 1 Bark Boiler must meet notification requirements and comply by September 13, 2007.
APPLICABLE	63 Subpart DDDDD	40 CFR 63.7499	Subpart DDDDD – Subcategories	No. 1 Bark Boiler is in the large solid fuel subcategory.
APPLICABLE	63 Subpart DDDDD	40 CFR 63.7506	Subpart DDDDD – Limited Requirements	No. 1 Bark Boiler must meet the notification requirements of 63.9(b).
APPLICABLE	63 Subpart DDDDD	40 CFR 63.7545	Subpart DDDDD – Notifications	No. 1 Bark Boiler must submit the required notification by March 12, 2005.
APPLICABLE	63 Subpart DDDDD	Appendix A	Health-Based Compliance Alternative	Must submit demonstration by September 13, 2006.

ATTACHMENT BFM-EU1-IV3

ALTERNATIVE METHODS OF OPERATION

ATTACHMENT BFM-EU1-IV3

ALTERNATIVE METHODS OF OPERATION

The No. 1 Bark Boiler can burn bark/wood residuals, natural gas, No. 2 fuel oil, and/or No. 6 fuel oil. In addition, TRS/HAP gases from the batch digester system, multiple effect evaporators, and the turpentine recovery system are burned in the No. 1 Bark Boiler as the primary destruction device. Facility-generated tall oil blended with No. 6 fuel oil can also be burned in the No. 1 Bark Boiler.

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application for air permit. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised/renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. **The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit.** A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air construction permitting and insignificant emissions units are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

   ☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

   ☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   ☒ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section: **No. 2 Bark Boiler**

3. Emissions Unit Identification Number: **019**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A			**26**	☐ Yes ☒ No

9. Package Unit:
   Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

No. 2 Bark Boiler is a boiler that may be fired with carbonaceous fuel, No. 6 fuel oil, No. 2 fuel oil, facility-generated used oil, tall oil, and natural gas.

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

Wet Scrubber
Centrifugal collector
Venturi scrubber

2. Control Device or Method Code(s): **002, 008, 053**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: **601** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: **24** hours/day **52** weeks/year	**7** days/week **8,760** hours/year
6. Operating Capacity/Schedule Comment: **Based on carbonaceous fuel firing only.** **Maximum heat input due to fuel oil firing is 180 MMBtu/hr.**	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **EP21**	2. Emission Point Type Code: **2**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **225** feet	7. Exit Diameter: **13** feet
8. Exit Temperature: **200** °F	9. Actual Volumetric Flow Rate: **495,073** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	

15. Emission Point Comment:

The acfm and temperature are for combined operation of Nos. 1 and 2 Power Boilers and Nos. 1 and 2 Bark Boilers.

Nos. 1 and 2 Power Boilers: 80,000 acfm and 325 °F.
No. 1 Bark Boiler: 115,073 acfm and 160 °F.
No. 2 Bark Boiler: 220,000 acfm and 150 °F.

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 5

1. Segment Description (Process/Fuel Type): **External Combustion Boilers; Industrial; Wood/Bark Waste; Wood/Bark-Fired Boiler (>50,000 lb steam)**		
2. Source Classification Code (SCC): **1-02-009-02**	3. SCC Units: **Tons Burned**	
4. Maximum Hourly Rate: **75.13**	5. Maximum Annual Rate: **658,095**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash: **1.9**	9. Million Btu per SCC Unit: **8**
10. Segment Comment: **Maximum rates based on 601 MMBtu/hr maximum heat input, 50% moisture, and 4,000 Btu/lb for wood/bark.**		

Segment Description and Rate: Segment 2 of 5

1. Segment Description (Process/Fuel Type): **External Combustion Boilers; Industrial; Residual Oil; Grade 6 Oil**		
2. Source Classification Code (SCC): **1-02-004-01**	3. SCC Units: **1000 Gallons Burned**	
4. Maximum Hourly Rate: **1.232**	5. Maximum Annual Rate: **10,792**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **2.5**	8. Maximum % Ash: **0.1**	9. Million Btu per SCC Unit: **146**
10. Segment Comment: **Residual oil is used during startups, shutdowns, malfunctions, or temporary loss of bark. No. 6 fuel oil may contain tall oil and facility-generated used oil. Maximum hourly rate is based on 180 MMBtu/hr.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 3 of 5

1. Segment Description (Process/Fuel Type): **External Combustion Boilers; Industrial; Distillate Oil; Grades 1 and 2 Oil**		
2. Source Classification Code (SCC): **1-02-005-01**	3. SCC Units: **1000 Gallons Burned**	
4. Maximum Hourly Rate: **1.232**	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.5**	8. Maximum % Ash:	9. Million Btu per SCC Unit: **136**
10. Segment Comment: **No. 2 fuel oil is fired as a pilot fuel during startups, shutdowns, malfunctions, and for dry out fires after a water wash. Maximum rate is estimated from residual rate.**		

Segment Description and Rate: Segment 4 of 5

1. Segment Description (Process/Fuel Type): **External Combustion Boilers; Industrial; Natural Gas; Over 100 MMBtu/hr**		
2. Source Classification Code (SCC): **1-02-006-01**	3. SCC Units: **Million Cubic Feet Burned**	
4. Maximum Hourly Rate: **0.3**	5. Maximum Annual Rate: **7**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0**	8. Maximum % Ash:	9. Million Btu per SCC Unit: **1,036**
10. Segment Comment: **Natural gas is fired as a pilot fuel during startups, shutdowns, malfunctions, and for dry out fires after a water wash.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment **5** of **5**

1. Segment Description (Process/Fuel Type): **External Combustion Boilers; Industrial; Liquid Waste; Tall Oil**		
2. Source Classification Code (SCC): **1-02-013-01**	3. SCC Units: **1000 Gallons Burned**	
4. Maximum Hourly Rate: **1.266**	5. Maximum Annual Rate: **5,400**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.05**	8. Maximum % Ash: **0**	9. Million Btu per SCC Unit: **142**
10. Segment Comment: **Facility-generated tall oil blended with No. 6 fuel oil. Maximum hourly rate is based on 180 MMBtu/hr.**		

Segment Description and Rate: Segment of

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
CO – Carbon Monoxide			NS
NOx – Nitrogen Oxides			NS
PM – Particulate Matter – Total	008	002	EL
PM10 – Particulate Matter – PM10	008	002	NS
SO2 – Sulfur Dioxide			EL
VOC – Volatile Organic Compounds			NS
HAPs – Hazardous Air Pollutants			NS
H095 – Formaldehyde			NS
H106 – Hydrochloric Acid			EL
H113 – Manganese Compounds	008	002	EL
H114 – Mercury	008	002	EL
H115 – Methanol			NS

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **H113 (Manganese Compounds)**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **3.67** lb/hour **16.06** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **6.1×10^{-3} lb/MMBtu** Reference: **Fuel Analysis**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Carbonaceous fuel burning:** **6.1×10^{-3} lb/MMBtu x 601 MMBtu/hr = 3.67 lb/hr** **3.67 lb/hr x 8,760 hr/yr ÷ 2,000 lb/ton = 16.06 TPY**	
11. Potential Fugitive and Actual Emissions Comment: **Emission factor based on 90 percent confidence level of fuel analysis data.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **9/13/07**
3. Allowable Emissions and Units: **6.1x10^{-3} lb/MMBtu**	4. Equivalent Allowable Emissions: **3.67** lb/hour **16.06** tons/year
5. Method of Compliance: **Fuel Analysis**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on carbonaceous fuel firing only.**	

Allowable Emissions Allowable Emissions of

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **H106 (Hydrochloric Acid)**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **54.1** lb/hour **236.9** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.09 lb/MMBtu** Reference: **40 CFR 63, Subpart DDDDD**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Carbonaceous Fuel Burning:** **0.09 lb/MMBtu x 601 MMBtu/hr = 54.1 lb/hr** **54.1 lb/hr x 8,760 hr/yr ÷ 2,000 lb/ton = 236.9 TPY**	
11. Potential Fugitive and Actual Emissions Comment: **40 CFR 63, Subpart DDDDD**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions: **9/13/07**
3. Allowable Emissions and Units: **0.09 lb/MMBtu**	4. Equivalent Allowable Emissions: **54.1** lb/hour **236.9** tons/year
5. Method of Compliance: **Fuel Analysis**	
6. Allowable Emissions Comment (Description of Operating Method): **40 CFR 63, Subpart DDDDD**	

Allowable Emissions Allowable Emissions of

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **H114 (Mercury)**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.0054** lb/hour **0.024** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **$9x10^{-6}$ lb/MMBtu** Reference: **40 CFR 63, Subpart DDDDD**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Carbonaceous Fuel Burning:** **$9x10^{-6}$ lb/MMBtu x 601 MMBtu/hr = 0.0054 lb/hr** **0.0054 lb/hr x 8,760 hr/yr ÷ 2,000 lb/ton = 0.024 TPY**	
11. Potential Fugitive and Actual Emissions Comment: **40 CFR 63, Subpart DDDDD**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions: **9/13/07**
3. Allowable Emissions and Units: **$9x10^{-6}$ lb/MMBtu**	4. Equivalent Allowable Emissions: **0.0054** lb/hour **0.024** tons/year
5. Method of Compliance: **Fuel Analysis**	
6. Allowable Emissions Comment (Description of Operating Method): **40 CFR 63, Subpart DDDDD**	

Allowable Emissions Allowable Emissions of

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **1**

1. Visible Emissions Subtype: **VE30**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **30** % Exceptional Conditions: **40** % Maximum Period of Excess Opacity Allowed: **2** min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **Rule 62-296.410(2)(b)1. VE limit effective only if the VE measurements can be made without being substantially affected by plume mixing or moisture condensation (Rule 62-296.404(2)(b), F.A.C.).**	

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor **1** of **1**

1. Parameter Code: **FLOW**	2. Pollutant(s):
3. CMS Requirement: **Volumetric flow rate** ☐ Rule ☒ Other	
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **No. 6 fuel oil firing, surrogate for SO_2.**	

Continuous Monitoring System: Continuous Monitor of

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ____ ☒ Previously Submitted, Date **May 2005**

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ____ ☒ Previously Submitted, Date **May 2005**

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ____ ☒ Previously Submitted, Date **May 2005**

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ____ ☒ Previously Submitted, Date **May 2005**
   ☐ Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ____ ☐ Previously Submitted, Date ____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID: ____
   Test Date(s)/Pollutant(s) Tested: ____
   ☐ Previously Submitted, Date: ____
   Test Date(s)/Pollutant(s) Tested: ____
   ☐ To be Submitted, Date (if known): ____
   Test Date(s)/Pollutant(s) Tested: ____
   ☒ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   ☒ Attached, Document ID: **HBCA Report** ☐ Not Applicable

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: _____ ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☒ Attached, Document ID: **BFM-EU2-IV1** ☐ Not Applicable
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation
   ☒ Attached, Document ID: **BFM-EU2-IV3** ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
      ☐ Copy Attached, Document ID: _____
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
      ☐ Attached, Document ID: _____
      ☐ Previously Submitted, Date: _____
   ☒ Not Applicable

Additional Requirements Comment

ATTACHMENT BFM-EU2-IV1

IDENTIFICATION OF APPLICABLE REQUIREMENTS

ATTACHMENT BFM-EU2-IV1

IDENTIFICATION OF APPLICABLE REQUIREMENTS

No. 2 Bark Boiler

APPLIC STAT	RULE DESCRIP	RULE NUMBER	RULE TITLE	RATIONALE
APPLICABLE	62-296 <	62-296.410(1)(b)	Carbonaceous Fuel Burning Equipment	
APPLICABLE	62-296 <	62-296.410(3)	Test Methods and Procedures	
APPLICABLE	62-297	62-297.310	General Test Requirements	
APPLICABLE	62-297	62-297.401(5)	EPA Method 5 – Determination of Particulate Emissions from Stationary Sources	
APPLICABLE	62-297	62-297.401(6)	EPA Method 6 – Determination of Sulfur Dioxide Emissions from Stationary Sources	
APPLICABLE	62-297	62-297.401(9)(a)	EPA Method 9 – Visual Determination of the Opacity of Emissions from Stationary Sources	
APPLICABLE	63 Subpart A	40 CFR 63	Subpart A – NESHAPs General Provisions	
APPLICABLE	63 Subpart A	40 CFR 63.1 – 63.16	Subpart A – General Provisions	No. 2 Bark Boiler is subject to the notification requirements of Subpart DDDDD.
APPLICABLE	63 Subpart DDDDD	40 CFR 63.7485	Subpart DDDDD – Applicability	No. 2 Bark Boiler is an industrial boiler of size > 10 MMBtu/hr located at a major source of HAPs.
APPLICABLE	63 Subpart DDDDD	40 CFR 63.7490	Subpart DDDDD – Applicability	No. 2 Bark Boiler is subject to the requirements of Subpart DDDD for existing boilers.
APPLICABLE	63 Subpart DDDDD	40 CFR 7495	Subpart DDDDD – Compliance Dates	No. 2 Bark Boiler must meet notification requirements and comply by September 13, 2007.
APPLICABLE	63 Subpart DDDDD	40 CFR 63.7499	Subpart DDDDD – Subcategories	No. 2 Bark Boiler is in the large solid fuel subcategory.
APPLICABLE	63 Subpart DDDDD	40 CFR 63.7506	Subpart DDDDD – Limited Requirements	No. 2 Bark Boiler must meet the notification requirements of 63.9(b).
APPLICABLE	63 Subpart DDDDD	40 CFR 63.7545	Subpart DDDDD – Notifications	No. 1 Power Boiler must submit the required notification by March 12, 2005.
APPLICABLE	63 Subpart DDDDD	Appendix A	Health-Based Compliance Alternative	Must submit demonstration by September 13, 2006

ATTACHMENT BFM-EU2-IV3

ALTERNATIVE METHODS OF OPERATION

ATTACHMENT BFM-EU2-IV3

ALTERNATIVE METHODS OF OPERATION

Buckeye Florida, L.P. is permitted to operate the No. 2 Bark Boiler by burning carbonaceous fuel (bark & woodwastes) and No. 6 fuel oil separately or in combination; with operation solely on No. 6 fuel oil limited to startup, shutdown, or malfunction. The No. 6 fuel oil may contain a small amount of facility-generated used oil. Natural gas or No. 2 fuel oil may be used as a pilot fuel during startups, shutdowns, malfunctions, and for dry-out fires after a water wash. Facility-generated tall oil blended with No. 6 fuel oil can also be burned in the No. 2 Bark Boiler.