Holtom, Jonathan

From: Liang, Hui
Sent: Monday, June 09, 2003 9:29 AM
To: Holtom, Jonathan
Subject: RE: Gilman at Taylor (1230033)

I wouldn't have problem to issue the Draft, I just want to give you as much time as I can to review the CAM information. I am tired of working with him, he doesn't think. You would know what I mean when you get his submittal. I might just issue him the TV renewal if you accept his CAM plan.
Thanks,
Hui.

-----Original Message-----
From: Holtom, Jonathan
Sent: Monday, June 09, 2003 9:22 AM
To: Liang, Hui
Cc: Sheplak, Scott
Subject: RE: Gilman at Taylor (1230033)

Hi Hui,

I spoke with Mr. Storey on May 29. Instead of providing manufacturer's curves for the different pressures, he is going to provide the requested comparison of past PM tests and the recorded pressures. This will be more site specific and will be sufficient to determine indicator ranges for Gilman's plant. Let's wait a few days and see if I get a copy of what he submitted to you before you go to the trouble of faxing it to me. How far have you gotten with the Draft permit? Do you have a target date for issuance? I'll get a CAM Appendix to you as soon as I can after receiving his information. I do have a couple of others that I am already working on.

Please let me know if you have any questions.
Jonathan

-----Original Message-----
From: Liang, Hui
Sent: Monday, June 09, 2003 8:49 AM
To: Holtom, Jonathan
Subject: Gilman at Taylor (1230033)
Importance: High

Dear Mr. Holtom:
I just got Gilman response about CAM. After talking with Mr. Storey with Darabi last week, I have the impression he would send you something separately. Please let me know if you want me to fax the information he sent in.
Thanks,
Hui.

Post-It® Fax Note 7671	Date 6/24	# of pages ▶ 7
To Mr. Holtom	From Hui	
Co./Dept. TU	Co. NED	
Phone # 291.9531	Phone # 904.3238	
Fax # 291 9533	Fax # 4363	

DARABI AND ASSOCIATES, INC.
Environmental Consultants

Bldg. A • 730 NE Waldo Road, Gainesville, Florida 32641 • Phone: 352/376-6533 • Fax: 352/692-5390

June 3, 2003

Ms. Hui Liang
Florida Department of Environmental Protection
Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7590

RE: Gilman Building Products: Perry Lumber
AIRS ID Number: 120033, Project Number 005
Response to Request for Additional Information, March 10, 2003
D&A Project No.: 04100-288-02-4000

Ms. Liang:

On behalf of the above referenced facility, the following information is provided in response to a letter dated March 10, 2003 from Mr. Christopher L. Kirts of the Northeast District Office. Information is provided in the order requested in the referenced correspondence. In addition, our office has been in contact with Mr. Jonathan Holtom of the Tallahassee office. Based on the conversations with Mr. Holtom requested items 1-6 have been combined into one response. Requested items 7-9 are addressed individually.

Signed and dated Responsible Official and Professional Engineer certification statements have been included with the responses. In addition, the previously submitted Compliance Assurance Monitoring Plan has been resubmitted based on the aforementioned responses to requested items 1-6.

If there are any questions concerning this matter, please contact Brian Storey at (352) 376-3166, extension 4132.

Sincerely,

Frank Darabi, P.E.
President

H:\lfeller\FAD\GilmanPerryRAI.6032003.doc

xc: Victor Garrett, Gillman Building Products
Don Hires, Gillman Building Products
Brian Storey, Darabi & Associates

Attachments: Comments and Responses
Compliance Assurance Monitoring Plan
RO and PE Certification Statements

RESPONSE TO THE DISTRICT REQUEST FOR ADDITIONAL INFORMATION

COMMENT NOS. 1-6

1. *Please compare past successful PM compliance test results to the associated pressure drop readings across the scrubber, and to the associated visible emissions Method 9 test results, if performed concurrently.*

2. *Please provide an original (not faxed) copy of the submitted manufacturer's Efficiency vs. Particle Size curve for the pressure drop of 2.5" S.P. across the scrubber.*

3. *Please provide a manufacturer's Efficiency vs. Particle Size curve at a pressure drop of 3.5" S.P. across the scrubber.*

4. *Please provide a discussion regarding the reason for correction of all particles to a specific gravity of 2.2 in the submitted Collection Efficiency vs. Particle Size curve. Has the density of the gas/liquid stream in your scrubber ever been measured? If so, what was the results?*

5. *Please provide the data from similar emissions units that would provide a reliable pre-controlled emission factor.*

6. *Please provide additional control device efficiency test data from similar units or provided from the manufacturer.*

RESPONSE NOS. 1-6

As discussed in conversations between Mr. Jonathan Holtom of FDEP and our office, the comments listed above are requested to justify the pressure range of 2.5 to 3.5 inches of water column (2.5-3.5 in-H2O) as previously set in the Gilman Building Products Perry Mill's (Facility's) Compliance Assurance Monitoring Plan (CAM Plan), submitted on February 11, 2003. The range was set based on discussions with the cyclone manufacturer and boiler operators at the Facility. Although the lower range of 2.5 in-H2O was verified by the cyclone manufacturer, the upper range was not supported by documentation.

In order to provide supporting documentation for the pressure range listed in the Facility's CAM Plan, Darabi & Associates (D&A), on behalf of the Facility, has modified the plan based on the following historic data, collected during the Facility's annual particulate matter emission measurements and visible emissions operations. The following table lists the recorded PM emission and corresponding pressure drop across the cyclones taken at the time of the tests.

Table 2.1 Monitoring Approach	
I. Indicator	
a. Monitoring Approach	Pressure drop across multi-cyclone (in-H2O)
II. Indicator Range	
a. Acceptable Range	2.2 – 2.9 in-H2O
III. Performance Criteria	
a. Data Representativeness	Gas inlet and outlet ducts are monitored and the differential pressure is reported using a manometer inside the Boiler Room
b. Verification of Operational Status	Not applicable
c. QA/QC Practices	Manometer calibrated and maintained as required by the manufacturer.
d. Monitoring Frequency	Pressure drop is recorded once per shift
e. Procedure	Operators record the pressure drop during optimum boiler operating capacity, i.e., when the boiler is running at maximum capacity, for the shift. At the end of the work day a daily average is calculated and recorded.
f. Averaging Period	Daily average

Year	PM Emission (lb/hr)	Pressure Drop Across Cyclones (in-H2O)
1998	8.08	2.8-3.0
1999	7.61	2.4
2000	8.03	2.1
2001	7.05	2.5
2002	6.39	2.5

A copy of the test reports from 1998 to 2002 have been included as an attachment to this letter.

The Facility's current Title V permit limits the particulate matter emission rate to 9.20 pounds per hour. The previously submitted maximum pressure drop measurement of 3.5 in-H2O is not supported by the PM emission measurement tests. Based on the tabulated historic data, the plan has been modified to a conservative range of 2.2 – 2.9 in-H2O. This range will keep the Facility operating well below the 9.20 pounds per hour PM emission limit.

A copy of the modified CAM Plan has been included as an attachment to this letter.

COMMENT NO. 7

Based on the information in the record, it seems that the annual Potential-to-Emit for CO and VOC emissions are greater than the 250 tons per year Prevention of Significant Deterioration (PSD) major source level. Please provide detailed Potential-to-Emit calculations for CO and VOC emissions. In addition, any future modifications at the facility may need to go through a PSD applicability determination.

RESPONSE NO. 7

The potential-to-emit (PTE) calculations for CO are as follows:

1. EU 001 - Wood Fired Boiler w/ two multi-cyclone collectors

   Maximum process throughput rate: 11,000 lbs wood waste/hour = 5.5 tons/hour
   Operating hours: 8760 hours/year
   Emission factor: 4 lbs CO/tons wood waste burned

   Calculations:
   PTE EU001 = (5.5 tons/hr) x (8760 hrs/yr) x (4 lbs CO/ton) x (1/2000)
   = 96.36 tons/yr

2. EU 002 - Sawdust silo with baghouse

   Maximum process throughput rate: 131,400 tons/year
   Baghouse efficiency: 99.99%

   Calculations:
   PTE EU002 = (131,400 tons/year) - (131,400 tons/year x 0.9999)
   = 13.14 tons/year

3. EU 004 - Direct-fired kiln #3 w/ roof vents

   Maximum process throughput rate: 60,000 M board feet/year
   Emission factor: 0.491 lbs CO/Mbf

   Calculations:
   PTE EU004 = (60,000 Mbf/yr) x (0.491 lbs CO/Mbf) x (1/2000)
   = 14.73 tons/yr

4. EU 005 - Fuel system w/ bin, baghouse, hopper and cyclone

   N/A, CO not emitted from this EU

5. EU 006 - Indirect-fired kiln #1

   N/A, CO not emitted from this EU

6. EU 007 - Indirect-fired kiln #2

   N/A, CO not emitted from this EU

Total annual CO emission **= (PTE EU 001) + (PTE EU 002) + (PTE EU 004)**
= (96.36 tons/yr) + (13.14 tons/yr) + (14.73 tons/yr)
= 124.23 tons/year

The PTE calculations for VOC are as follows:

1. EU 001 - Wood Fired Boiler w/ two multi-cyclone collectors

   N/A, VOC not emitted from this EU

2. EU 002 - Sawdust silo with baghouse

   N/A, VOC not emitted from this EU

3. EU 004 - Direct-fired kiln #3 w/ roof vents

   Maximum process throughput rate: 60,000 Mbf/year
   Emission factor: 3.32 lbs VOC/Mbf

   Calculations:
   PTE EU004 = (60,000 Mbf/yr) x (3.32 lbs VOC/Mbf) x (1/2000)
   = **99.6 tons VOC/yr**

4. EU 005 - Fuel system w/ bin, baghouse, hopper and cyclone

   N/A, CO not emitted from this EU

5. EU 006 - Indirect-fired kiln #1

   Maximum process throughput rate: 30,000 Mbf/year
   Emission factor: 3.32 lbs VOC/Mbf

   Calculations:
   PTE EU006 = (30,000 Mbf/yr) x (3.32 lbs VOC/Mbf) x (1/2000)
   = **49.8 tons VOC/yr**

6. EU 007 - Indirect-fired kiln #2

   Maximum process throughput rate: 30,000 Mbf/year
   Emission factor: 3.32 lbs VOC/Mbf

   Calculations:
   PTE EU007 = (30,000 Mbf/yr) x (3.32 lbs VOC/Mbf) x (1/2000)
   = **49.8 tons VOC/yr**

Total annual VOC emission = (PTE EU 004) + (PTE EU 006) + (PTE EU 007)
= (99.6 tons/yr) + (49.80 tons/yr) + (49.80 tons/yr)
= 199.20 tons/year

Maximum process throughput rates are based on permit limiting conditions and design process rates. Emission factors are based on the following sources:

- Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition
- National Council of the Paper Industry for Air and Stream Improvement, Inc. (NCASI) Technical Bulletin No. 718

Based on our calculations the annual PTE for both CO and VOC is above the 250 tons per year threshold for PSD. The Facility has been made aware that any future modifications will require a PSD applicability determination process.

COMMENT NO. 8

Based on the recent updated information, it seems that the facility may be a major source for total HAPs due to the annual HAPs emissions from the kilns being more than 25 TPY. Please provide detailed total HAP calculations. Please note any future modification at the facility may need to go through a MACT case-by-case determination.

RESPONSE NO. 8

Since most HAP from the Facility is accounted for in the VOC emission estimates (refer to Response No. 7), and since there is no NESHAP standard for the lumber industry for which HAP estimates might be applicable, the calculations for total HAP from the kilns (EU004, EU006, EU007) are based on NCASI Technical Bulletin No. 845. From NCASI, the two dominant hazardous pollutants are Formaldehyde (H095) and Methanol (H115). HAP emissions are based on the designed maximum process rates, in thousand board feet per year, for each kiln. The rates are as follows:

- EU004, Direct-fired kiln – 60,000 Mbf/yr
- EU006, Indirect-fired kiln #1 – 30,000 Mbf/yr
- EU007, Indirect-fired kiln #2 – 30,000 Mbf/yr

The following tables summarizes the emission factor, emissions in tons per year, and the total HAP for each kiln.

EU004 Direct-fired kiln		
Pollutant	Emission Factor (lbs/Mbf)	Emission (tons/yr)
Formaldehyde	0.103	3.09
Methanol	0.265	7.95
Total EU004 HAPs		**11.04**

EU006 Indirect-fired kiln #1		
Pollutant	Emission Factor (lbs/Mbf)	Emission (tons/yr)
Formaldehyde	0.103	1.545
Methanol	0.265	3.975
Total EU006 HAPs		**5.52**

EU007 Indirect-fired kiln #2		
Pollutant	Emission Factor (lbs/Mbf)	Emission (tons/yr)
Formaldehyde	0.103	1.545
Methanol	0.265	3.975
Total EU007 HAPs		**5.52**

The estimated total HAP emissions produced on site are **22.08 tons/yr**, below the major source threshold of 25 tons/yr.

COMMENT NO. 9

Based on the information in the record, the PM Potential-to-Emit from the Planar Mill Shavings System is 19 TPY based on 3600 hours of annual operation. It appears that this emission unit does not meet the insignificant emission unit criteria established in Rule 62-213.430(6), F.A.C., and therefore cannot be classified as being an insignificant source. It appears that it should be classified as an unregulated emissions unit instead. Please update both the Insignificant and Unregulated emission units lists accordingly

REPSONSE NO. 9.

Although the Planer Mill's current hours of operation are approximately 5,800 hours per year, the potential exists to operate the Planer Mill at 8,760 hours per year. The Planer Mill has a design capacity of 90,000 Mbf/yr. Based on the design capacity, and a emission factor of 0.10 lbs PM/Mbf for planar mills, developed by NCASI, the potential PM emission is therefore:

(90,000 Mbf/yr) x (0.10 lbs PM/Mbf) x (1/2000 ton/lb) = 4.5 tons PM/yr

This is below the 5 tons/yr threshold as set in 62-213.430(6) of the F.A.C. The Planer Mill should continue to be listed as an "Insignificant Activity".

--ATTENTION MAIL ROOM--

PLEASE ROUTE THIS DOCUMENT TO:

Jonathan Hollom - DARM

Name of Individual/Office

5505

Mail Station Number

Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

March 10, 2003

CERTIFIED - RETURN RECEIPT

RECEIVED
MAR 19 2003
BUREAU OF AIR REGULATION

Mr. Victor H. Garrett
Vice President, Manufacturing
Gilman Building Products Company, LLC
3823 Owens Road
Yulee, Florida 32097

Dear Mr. Garrett:

Taylor County – Air Permitting
Gilman Building Products Company, LLC
AIRS ID Number 1230033; Project Number 005
Request For Additional Information Regarding TV Permit Renewal

In accordance with Rule 62-213.420(1)(b)2., F.A.C., and Rule 62-4.070(1), F.A.C., the Department has reviewed the subject application and has determined that the following information and questions need to be answered before the application can be further processed.

Should your response to any of the below items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

1. Please compare past successful PM compliance test results to the associated pressure drop readings across the scrubber, and to the associated visible emissions Method 9 test results, if performed concurrently.

2. Please provide an original (not faxed) copy of the submitted manufacturer's Efficiency vs. Particle Size curve for the pressure drop of 2.5" S.P. across the scrubber.

3. Please provide a manufacturer's Efficiency vs. Particle Size curve at a pressure drop of 3.5" S.P. across the scrubber.

4. Please provide a discussion regarding the reason for correction of all particles to a specific gravity of 2.2 in the submitted Collection Efficiency vs. Particle Size curve. Has the density of the gas/liquid stream in your scrubber ever been measured? If so, what was the result?

5. Please provide the data from similar emissions units that would provide a reliable pre-controlled emissions factor.

6. Please provide additional control device efficiency test data from similar units or provided from the manufacturer.

7. Based on the information in the record, it seems that the annual Potential-to Emit for CO and VOC emissions are greater than the 250 tons per year Prevention of Significant Deterioration (PSD) major source level. Please provide detailed Potential-To-Emit calculations for CO and VOC emissions. In addition, any future modifications at the facility may need to go through a PSD applicability determination.

8. Based on the recent updated information, it seems that the facility may be a major source for total HAPs due to the annual HAPs emissions from the kilns being more than 25 TPY. Please provide detailed total HAP calculations. Please note any future modification at the facility may need to go through a MACT case-by-case determination.

9. Based on the information in the record, the PM Potential-To-Emit from the Planer Mill Shavings System is 19 TPY based on 3600 hours of annual operation. It appears that this emissions unit does not meet the insignificant emission unit criteria established in Rule 62-213.430(6), F.A.C., and therefore cannot be classified as being an insignificant source. It appears that it should be classified as an unregulated emissions unit instead. Please update both the Insignificant and Unregulated emission units lists accordingly.

Responsible Official (R.O.) Certification Statement:

Rule 62-213.420, F.A.C. requires that a responsible official must certify all Title V permit applications. Due to the nature of the information requested above, the responsible official should certify your response. Please complete and submit a new R.O. certification statement page from the new long application form, DEP Form No. 62-210.900(1), effective February 11, 1999.

Professional Engineer (P.E.) Certification Statement:

Rule 62-4.050(3), F.A.C. requires that a professional engineer registered in the State of Florida must certify all applications for a Department permit. This requirement also applies to responses to Department requests for additional information of an engineering nature. As a result, a professional engineer registered in the State of Florida should certify your response. Please complete and submit a new P.E. certification statement page from the new long application form, DEP Form No. 62-210.900(1), effective February 11, 1999.

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

If you should have any questions, please call Hui Liang, P.E. at (904) 807-3238.

Sincerely,

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

CLK: HL

Cc: Frank A. Darabi, PE, Darabi & Associates, Inc.
Jonathan Holtom, P.E., DARM

--ATTENTION MAIL ROOM--

PLEASE ROUTE THIS DOCUMENT TO:

Jonathan Holtom

Name of Individual/Office

#5500

Mail Station Number

DARABI AND ASSOCIATES, INC.
Environmental Consultants

Bldg. A • 730 NE Waldo Road, Gainesville, Florida 32641 • Phone: 352/376-6533 • Fax: 352/692-5390

February 11, 2003

Ms. Hui Liang
Florida Department of Environmental Protection
Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7590

RE: Gilman Building Products: Perry Lumber
AIRS ID Number: 1230033, Project Number 005
Response to Request for Additional Information
D&A Project No. 04100-288-01

Ms. Liang:

On behalf of the above-referenced facility, the following information is provided in response to a letter dated November 13, 2002 from Christopher L. Kirts of the Northeast District Office. Information is provided in the order requested in the referenced correspondence. In each case, the DEP request is repeated with the response immediately following:

As requested, signed and dated Responsible Official and Professional Engineer certification statements have been included as attachments to this response.

If there are any questions concerning this matter, please contact Brian Storey at (352) 376-6533, extension 4132.

Sincerely,

Frank Darabi, P.E.
President

H:\lfeller\FAD\GilmanPerryLumberRAIResponse.2112003.doc

Attachments: Comments and Responses
Compliance Assurance Monitoring Plan
RO and PE Certification Statements

xc: Victor Garrett, Gilman Building Products
Don Hires, Gilman Building Products
Brian Storey

RESPONSE TO THE DISTRICT REQUEST FOR ADDITIONAL INFORMATION

COMMENT

In the October 18 submittal, it was stated that the multi-cyclone manufacturer of Emission Unit 001, wood-fired boiler was Zurn Industries, Inc., with a 65% removal efficiency. However, the previously submitted, 12/28/1989 construction permit application for this emissions unit states the multi-cyclone to be manufactured by Warren Engineering, Inc. with a 88% removal efficiency. Please verify the information submitted in the October 18 submittal. Has the boiler been replaced? If so, state when this replacement occurred and provide the Department approval of the replacement. In addition, if available, please provide a pre-control device stack test report.

RESPONSE

Gilman Building Products (Gilman) purchased the Perry Lumber Company in October of 1996, at which time all previous permit information was transferred to the current Air Operating Permit (Permit No. 1230033-001-AO). In talking with mill personnel it is unclear why there is a discrepancy with the referenced cyclone manufacturer. The mill's Title V records indicate Zurn Industries, Inc. as the multi-cyclone manufacturer. In preparing the October 18, 2002 submittal, and in determining Compliance Assurance Monitoring (CAM) rule applicability, information regarding the manufacturer was collected from the cyclone equipment, and from design drawings. Zurn Industries, Inc. was contacted, and was able to supply specific cyclone efficiency data (efficiency curve supplied in our October 23 response letter to the Northeast District Office).

The boiler has not been replaced, nor do Gilman records indicate a replacement of the boiler prior to the Gilman purchase. In addition, Gilman does not have record of any pre-control device stack testing, possibly performed prior to Gilman acquiring the Perry mill.

COMMENT

Based upon the information in your October 18 submittal, and department files, the department concurs that the Wood Fired Boiler (Emission Unit 001) is subject to the Compliance Assurance Monitoring (CAM) requirements. In accordance with 40 CFR 64.5(a), you are required to submit the information required under 40 CFR 64.4. The submission (monitoring) shall satisfy the design requirement in 40 CFR 64.3 and shall included the following information:

1) *Information on indicators, indicator ranges or process by which indicators are to be established, and performance criteria pursuant to 64.4(a);*
2) *Justification for the proposed elements of the monitoring pursuant to 64.4(b);*
3) *Control device operating data recorded during performance test, supplemented by engineering assessments or manufacturer's recommendations to justify the proposed indicator range pursuant to 64.4(c);*
4) *Test plan and schedule for obtaining data, if performance test data are not available pursuant to 64.4(d);*

5) *Implementation plan, if monitoring requires installation, testing, or other activities prior to implementation pursuant to 64.4(e).*

RESPONSE

A CAM Plan has been prepared for the mill and is included for DEP review as an attachment to this response letter. Once the permit application and CAM Plan have been approved the mill will begin implementing the monitoring requirements as described in the mill's CAM Plan.

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official:
Victor H. Garrett, Vice President, Manufacturing Ops

2. Owner/Authorized Representative or Responsible Official Mailing Address:
Organization/Firm: **Gilman Building Products Company**
Street Address: **3823 Owens Road**
City: **Yulee** State: **Florida** Zip Code: **32097**

3. Owner/Authorized Representative or Responsible Official Telephone Numbers:
Telephone: **(904) 548 - 1013** Fax: **(904) 548 - 1029**

4. Owner/Authorized Representative or Responsible Official Statement:

I, the undersigned, am the owner or authorized representative(check here [ ], if so) or the responsible official (check here [X], if so) of the Title V source addressed in this application, whichever is applicable. 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. 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 any permitted emissions unit.*

Victor H. Garrett 02/06/03

Signature Date

* Attach letter of authorization if not currently on file.

Professional Engineer Certification

1. Professional Engineer Name: **Frank A. Darabi, P.E.**
Registration Number: **20385**

2. Professional Engineer Mailing Address:
Organization/Firm: **Darabi & Associates, Inc.**
Street Address: **730 NE Waldo Road, Building A**
City: **Gainesville** State: **Florida** Zip Code: **32641**

3. Professional Engineer Telephone Numbers:
Telephone: **(352) 376 - 6533** Fax: **(352) 377 - 3166**

4. 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.

If the purpose of this application is to obtain a Title V source air operation permit (check here [X], 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 schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit 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.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision 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.

Signature

2/11/03
Date

(seal)

* Attach any exception to certification statement.

COMPLIANCE ASSURANCE MONITORING PLAN
FOR
GILMAN BUILDING PRODUCTS
PERRY LUMBER MILL
TAYLOR COUNTY, FLORIDA

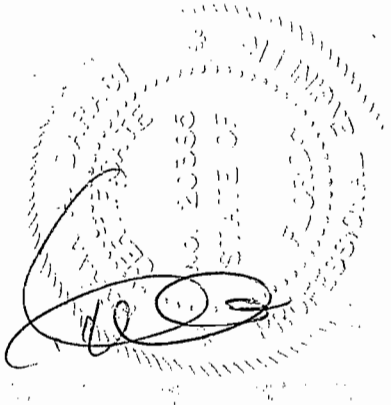
Prepared for:

GILMAN BUILDING PRODUCTS
PERRY LUMBER MILL
Perry, Florida

Prepared by:

DARABI & ASSOCIATES, INC.
730 NE Waldo Road, Building A
Gainesville, Florida 32641

February 2003



EXECUTIVE SUMMARY

Darabi & Associates, Inc., on behalf of Gilman Building Products Perry Mill, located in Perry, Florida, has prepared this Compliance Assurance Monitoring Plan (CAM Plan) in accordance with the Environmental Protection Agency's 40 CFR 64 regulations. The following information summarizes information described in the facility's plan.

- Control technology: Multi-clone cyclone without fly ash reinjection
- Pollutant: Particulate matter (PM)
- Emission Unit ID No.: 001
- Emission Unit description: Wood-fired boiler
- Indicator monitored: Pressure drop across Cyclone
- Monitoring approach rationale: Control efficiency is a function of inlet velocity, and changes in velocity result in changes in pressure drop. If inlet velocity exceeds a specific value, turbulence becomes excessive and control efficiency decreases.
- Monitoring location: Facility Boiler Room instrumentation
- Monitoring frequency: Once per shift
- Reporting units: Inches of water column (in. w.c., in-H2O)
- Recording process: Operators record pressure drop once per shift. At the end of the workday a daily average is calculated and recorded. Records are maintained with CAM Plan onsite.
- QA/QC Procedures: Instrumentation maintained and operated using manufacturer's specifications.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

1.0 INTRODUCTION

1.1 FACILITY DESCRIPTION

The Gilman Building Product (GBP), Perry Lumber Mill (Mill) is located at 1509 S Bryon Butler Highway, Perry, Taylor County, Florida. As illustrated in Figure 1.0, the site is located on US Highway 19, south of US Highway 27, within Section 26, Township 4 South, and Range 7 East, generally at Latitude 30° 6′ 18.36″ North and Longitude 82° 35′ 21.48″ West. The facility occupies approximately 42.5 acres of land.

The Mill is a southern pine lumber mill, commonly referred to as a "Chip-n-Saw" mill. Southern pine logs arrive by truck, are unloaded in a log storage area prior to debarking. Debarked logs are sawed into rough wet lumber. Lumber is dried on site by using the following equipment:

- One wood-fired boiler
- One direct-fired kiln
- Two indirect-fired kilns

Wood waste is fed from the sawmill into the boiler and direct-fired kiln via silos and conveyors. The indirect fired kilns are heated by steam from the wood-fired boiler. Particulate matter (PM) emissions from the silos, typically sawdust and bark, are controlled by a baghouse. PM emissions from the boiler are controlled by two multi-cyclone collectors (without fly ash reinjection). Emissions from the direct-fired kiln are recirculated back into the kiln.

1.2 REGULATORY BACKGOUND

Potential emissions from the boiler, kilns, and silos are regulated by the Environmental Protection Agency's (EPA's) Title V permitting program under the Clean Air Act Amendments of 1990 (CAA). The CAA required major facilities that emit pollution into the air to obtain a Title V permit to operate. This permit contains information about how the facility will comply with established emission standards and guidelines. The CAA also authorized EPA to develop regulations requiring facilities to monitor the performance of their emission control equipment. In September 1993, EPA proposed an enhanced monitoring rule that established monitoring criteria to demonstrate continuous compliance. On August 3, 1997, EPA issued the final version of the Compliance Assurance Monitoring rule (CAM).

The CAM rule established criteria that define what monitoring facility owner/operators must conduct to provide reasonable assurance of their compliance with emission limits and standards. The CAM rule includes Title V compliance certification language that allows facilities to use compliance assurance monitoring data to establish their compliance status with permit terms or conditions. They can then use this information to certify that their facilities comply with air pollution control requirements, as required by the CAA.

gilman.apr BAS 02/2003

For informational purposes only.

Figure 1.0 Site Location
Gilman Building Products, Perry Mill
Perry, Florida

DARABI
AND
ASSOCIATES, INC.
Environmental Consultants

1.3 PERMIT CONDITIONS

Under the Mill's current Title V permit (Permit No. 1230033-003-AV), issued by the Florida Department of Environmental Protection (DEP), the following emission unit identification numbers (EU ID) have been assigned:

EU ID No.	Description
001	Wood-fired boiler with two multi-cyclone collectors in series
002	Bark and sawdust silo with baghouse
004	No. 3 Direct-fired kiln, exhausted directly into the kiln
005	No. 2 Fuel system with baghouse
006	No. 1 Indirect-fired kiln
007	No. 2 Indirect-fired kiln

The following emission limitations and standards have been established by the Title V permit.

EU ID No.	Parameter	Limitation
001	Operation rate	≤ 46 MMBtu/hr
	Operational hours	≤ 8760 hr/yr
	PM Emissions	≤ 9.24 lbs/hr (40.47 TPY)
	Visible Emissions (VE)	≤ 30% opacity[1]
002	Operation rate	≤ 15 TPH
	Operational hours	≤ 8760 hr/yr
	VE	≤ 5% opacity
004	Operation rate	≤ 25 MMBtu/hr
	Operational hours	≤ 8760 hr/yr
	VE	≤ 20% opacity[1]
005	Operational hours	≤ 8760 hr/yr
	VE	≤ 5% opacity
006	Operational hours	≤ 8760 hr/yr
007	Operational hours	≤ 8760 hr/yr

Note 1: Except for 40% for 2 minutes from each vent

Based on the potential pre-control device PM emissions from the wood-fired boiler (EU ID No. 001), the facility has developed a CAM Plan in accordance with state and federal guidelines. The pre-control device PM emission calculations are included in the appendix of this plan. The purpose of the facility's CAM Plan is to provide reasonable assurance through a scheduled monitoring program that the boiler's multi-cyclone control device is operating properly and PM emissions are minimized. The facility identifies PM emission exceedances by monitoring specific boiler operation indicators, defined in the CAM Plan. These exceedances are then corrected in a timely manner.

Darabi & Associates, Inc. (D&A) has prepared this CAM Plan on behalf of the Mill to satisfy the conditions of the DEP Title V operational permit requirements. As the CAM Plan is implemented, the Mill Manager will periodically review the monitoring data and any recorded excursions or exceedances that have occurred. If the Mill Manager determines that deviations occurred that the monitoring data did not indicate, this plan and the monitoring parameters will be modified and submitted to DEP for review.

2.0 MONITORING APPROACH

The monitoring approach used by the Mill has been selected based on EPA's *Technical Guidance Document: Compliance Assurance Monitoring* document, dated August 1998, and existing boiler operation indicators currently monitored by the Mill.

The wood-fired boiler multi-cyclone control device efficiency is inversely related to the velocity of the device inlet. As the inlet velocity increases turbulence within the cyclone becomes excessive and the efficiency of PM removal decreases. The velocity head created by the cyclones is indicated on the boiler equipment control panel (refer to Figure 1.0 for boiler room location) as a pressure drop (in-H20) across the cyclone. Therefore, for the purpose of the CAM Plan, the Mill has elected to record the pressure drop across the cyclones as the performance indicator. A pressure range of 2.5 to 3.5 inches of water column (2.5 – 3.5 in-H2O) has been established based on historic data to indicate normal boiler operation and minimum PM emissions. The range is based on the varying BTU value and moisture content of the wood waste fuel and the amount of wood waste being fed to the boiler.

Mill personnel will record the pressure drop across the cyclones once per shift on a daily basis. A daily average will then be calculated and recoded. Every attempt will be made by Mill personnel to collect a pressure drop reading during peak operating capacity. Mill personnel will immediately investigate the cause of any deviations from the indicator range. Mill personnel will record the pressure measurement, the period of time the deviation occurred, the cause of the deviation, and the corrective action taken to bring the EU back into compliance. The Mill will calibrate and maintain the boiler instrument panel as required by the manufacturer.

A copy of the daily pressure measurement form used by the Mill has been provided in the appendix of this plan. Copies of the completed forms will be kept with the CAM Plan on site. In addition, a form to record excursions, exceedances, and the corrective action required to bring the EU back into compliance are provided in the appendix of this plan.

A summary of the Mill's monitoring approach has been included as Table 2.1.

per 6J0(a)
EU 005 5%NE W/O PM Limits req'd test for PM.

Table 2.1 Monitoring Approach	
I. Indicator	
a. Monitoring Approach	Pressure drop across multi-cyclone (in-H2O)
II. Indicator Range	
a. Acceptable Range	2.5 – 3.5 in-H2O Above or below requires corrective action.
III. Performance Criteria	
a. Data Representativeness	Gas inlet and outlet ducts are monitored and the differential pressure is reported on the Wood-Fired Boiler Instrument Panel
b. Verification of Operational Status	Not applicable
c. QA/QC Practices	Control panel instruments are calibrated and maintained as required by the manufacturer.
d. Monitoring Frequency	Pressure drop is recorded once per shift
e. Procedure	Operators record the pressure drop during optimum boiler operating capacity, i.e., when the boiler is running at maximum capacity, for the shift. At the end of the work day a daily average is calculated and recorded.
f. Averaging Period	Daily average

APPENDIX

DARABI AND ASSOCIATES, INC.
Environmental Consultants

Bldg. A • 730 NE Waldo Road, Gainesville, Florida 32641 • Phone: 352/376-6533 • Fax: 352/692-5390

October 23, 2002

Ms. Rita Felton-Smith
Air Permitting Engineer
Florida Department of Environmental Protection
Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7590

RE: Gilman Building Products: Perry Lumber
AIRS ID Number: 1230033, Project Number 005
Response to Request for Additional Information
D&A Project No. 04100-288-01

Dear Ms. Felton-Smith:

On behalf of the above-referenced facility, the following information is provided in response to a letter dated August 23, 2002 from Christopher L. Kirts from your office. Information is provided in the order requested in the referenced correspondence. In each case, the DEP request is repeated with the response immediately following.

If there are any questions concerning this matter, please contact Brian Storey at 352/376-6533, extension 4132.

Sincerely,

Frank A. Darabi, P.E.
President

H:\lfeller\FAD\GilmanPerryRAIResponse.10232002.doc

Attachments: Comments and Responses

Xc: Brian Storey

RESPONSE TO THE DISTRICT REQUEST FOR ADDITIONAL INFORMATION

COMMENT

Pursuant to 40 CFR 64.5(a)(3) & (b), the permitteee shall submit the information required in 40 CFR 64.4 as part of an application for a Title V Permit Renewal. Please address the applicability of CAM to the emission units at this facility.

RESPONSE

It is our understanding that the CAM Rule applies to emission units that meet the following conditions.

1. The unit is subject to an emission limitation or standard for the applicable regulated air pollutant,
2. The unit uses a control device to achieve compliance with any such emission limitation or standard, and
3. The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

The Gilman Building Products, Perry Lumber Company (facility) currently operates the following Title V regulated Emission Units (EUs).

EU ID No.	Brief Description	Control Device
001	Wood-fired Boiler	Two multi-cyclone collectors in series
002	Bark and sawdust silo	Baghouse
004	No. 3 Direct-fired kiln	Recirculated exhaust
005	Fuel system	Baghouse, hopper, and cyclone
006	No. 1 Indirect-fired kiln	None
007	No. 2 Indirect-fired kiln	None

In accordance with the facility's current Title V permit, EU No. 001 is the only unit with emission limitations. As listed in the permit (Section III, Subsection A.3), the limitation is defined as follows.

> "Paticulate Matter Emissions shall not exceed 0.2 lbs per MMBTU of heat input of carbonaceous fuel and are limited to 9.24 lbs/hr and 40.47 TPY."

In addition, it is understood that emission factors posted in EPA's AP-42 regarding lumber mills is unreliable due to the varying types of timber being processed. Therefore this response utilizes site-specific historical data to calculate the pre-control device emissions.

The following table summarizes the facility's particulate emissions compliance testing history.

Year	PM Emission (lb/hr)
1995	5.33
1996	4.39
1997	7.74
1998	8.08
1999	7.61
2000	8.03
2001	7.05
2002	6.39

These PM emission numbers represent post control device emissions.

Gilman Building Products contacted the multi-cyclone manufacturer, Zurn Industries, Inc., Air Systems Division, located in Birmingham, Alabama, to document the efficiency of the boiler control device. Included with this response is an estimated collection efficiency curve supplied by the manufacturer. From the efficiency curve the emission efficiency for particulates 10 microns in size (typical) was determined.

Efficiency (10 micron) = 65%

To respond to the CAM rule applicability, a hypothetical worse-case scenario was developed, where the pre-control device PM emission (X) was calculated using the greatest historical PM emission rate (8.08 lb/hr, 1998).

$X - (X * 0.65)$	= 8.08 lb/hr
$X - 0.65X$	= 8.08 lb/hr
$0.35X$	= 8.08 lb/hr
X	= 23.1 lb/hr

100 lb/hr → Cyclone
65% eff → 35% is emitted
63% eff → 37% is emitted
@ 63% 8.08 = 37% X ? X = 21.84 lb/hr = 95.65
@ 64% 8.08 = 36% X ? X = 22.44 lb/hr = 98.31

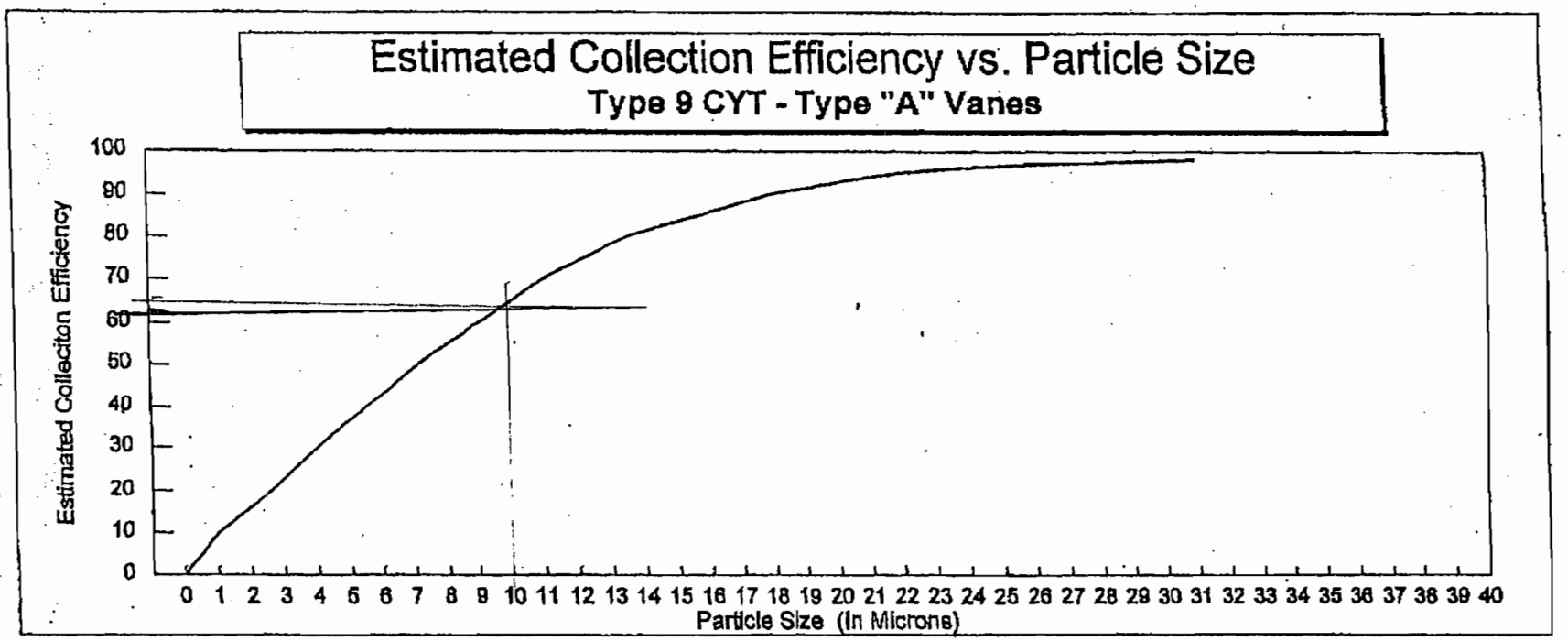
The pre-control device PM emission rate is 23.1 lbs/hr. The annual pre-control device emission is calculated below.

(23.1 lbs/hr) * (8,760 hrs/yr) * (1/2000 tons/lb) = 101.1 tons/yr

Therefore EU No. 001 meets the three criteria of the CAM rule.

EU. Nos. 002, 004, 005, 006, and 007 do not meet the CAM rule criteria.

The facility has been made aware of the CAM rule and is in the process of developing a Compliance Assurance Monitoring Plan for EU No. 001.



NOTES:

1. The curve above is offered as a guideline. It is not to be construed as a guarantee or contract obligation.

2. This prediction is based on all particles corrected to a specific gravity of 2.2., and a pressure drop of 2.5" S.P. across the collector.

Gilman Building Products, Perry Mill
Clean Air Act, Title V Operating Permit
Compliance Assurance Monitoring
Record of Pressure Measurements Across the Cyclones

Date	Pressure Reading Across Cyclones (in-H2O)			Daily Average (in-H2O)	Comments
	Shift ____	Shift ___	Shift ___		

Gilman Building Products, Perry Mill
Clean Air Act, Title V Operating Permit
Compliance Assurance Monitoring
Excess Emissions or Equipment Downtime Reporting Form

This form is to be used to report the following:

- Cyclone pressure drop measurements found to exceed the indicator range (2.5 – 3.5 in-H2O) as defined in the facility's CAM Plan and the corrective action taken to correct the problem
- Equipment downtime

I. General Information

Indicate which of the following this form is being used to report:

☐ Excess Emissions (please fill out Section II and Section IV)
☐ Downtime of emissions monitoring equipment
(please fill out Section III and Section IV)

Period covered by this report:

From: _____/_____/_____ To: _____/_____/_____

Name/Shift:

III. Excess Emissions

Describe the exceedance incident, including the suspected or known cause of the exceedance:

Identify the "Performance Indicator" reading (as defined in the facility's Compliance Assurance Monitoring Plan) at the time of the exceedance incident:

Identify the duration of exceedance (e.g., 1 hour, 45 minutes):

III. Excess Emissions (cont.)

Describe corrective action taken at the time of the exceedance incident:

Describe subsequent actions (if necessary) taken to prevent future exceedances:

IV. Downtime of Emission Monitoring Equipment

Identify the monitoring equipment which is nonfunctional:

Identify the duration of monitoring downtime (e.g., 1 hour, 45 minutes):

Describe the suspect or known cause of the incident:

IV. Downtime of Emission Monitoring Equipment (cont.)

Describe corrective actions taken at the time of the incident:

Describe subsequent actions (if necessary) taken to prevent future downtime:

General Comments:

V. Signature

Please sign and date:

_____ _____

Signature Date

LINDA E. FELLER
352-377-5821
JONES, EDMUNDS & ASSOCIATES, INC.
730 N. E. WALDO ROAD
GAINESVILLE FL 32641

1 LBS 1 OF 1

SHIP TO:
MS. HUI LIANG
904/448-4300
FLDEPT.OF ENVIRONMENTAL PROTECTION
7825 BAYMEADOWS WAY, SUITE B200
JACKSONVILLE FL 32256-7598

FL 322 9-04

UPS GROUND
TRACKING #: 1Z F62 6R2 03 9301 0298

BILLING: P/P

Reference # 1: 04100-288-01 (BAS)

TM

UIS 05.02.24 W00IE55 21.0A 01/2003

@4000 BTU/lb Bark @ 46 MMBTU/hr

Bark ⇒ uncontrolled = 270.25 lb PM/hr
controlled = 51.75 lb/hr

Wood ⇒ uncontrolled = 50.6
controlled = 24.15

} PM

wood ⇒ uncontrolled =