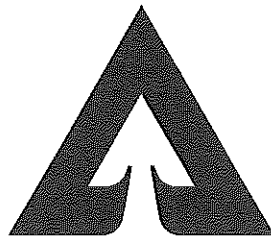


**COMPLIANCE TEST REPORT  
DETERMINATION OF CYLINDER GAS AUDIT  
ACCURACY FOR THE  
DRYER RTO STACK CO MONITOR,  
DRYER RTO STACK VOC MONITOR  
AND  
PRESS STACK VOC MONITOR**



**Weyerhaeuser**

**4111 West Four Mile Road  
Grayling, Michigan 49738**

**Prepared by:**

**Kathi Moss  
Environmental Manager  
Weyerhaeuser Company**

**Second Quarter, 2016**

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JUN 30 2016  
AIR QUALITY DIV.**



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION

**RENEWABLE OPERATING PERMIT  
REPORT CERTIFICATION**

Authorized by 1994 P.A. 451, as amended. Failure to provide this information may result in civil and/or criminal penalties.

Reports submitted pursuant to R 336.1213 (Rule 213), subrules (3)(c) and/or (4)(c), of Michigan's Renewable Operating (RO) Permit program must be certified by a responsible official. Additional information regarding the reports and documentation listed below must be kept on file for at least 5 years, as described in General Condition No. 22 in the RO Permit and be made available to the Department of Environmental Quality, Air Quality Division upon request.

Source Name Weyerhaeuser Company County Crawford  
Source Address 4111 West Four Mile Road City Grayling  
AQD Source ID (SRN) B7302 RO Permit No. MI-ROP-B7302-2010 RO Permit Section No. IV

Please check the appropriate box(es):

**Annual Compliance Certification (General Condition No. 28 and No. 29 of the RO Permit)**  
Reporting period (provide inclusive dates): From \_\_\_\_\_ To \_\_\_\_\_  
 1. During the entire reporting period, this source was in compliance with ALL terms and conditions contained in the RO Permit, each term and condition of which is identified and included by this reference. The method(s) used to determine compliance is/are the method(s) specified in the RO Permit.  
 2. During the entire reporting period this source was in compliance with all terms and conditions contained in the RO Permit, each term and condition of which is identified and included by this reference, EXCEPT for the deviations identified on the enclosed deviation report(s). The method used to determine compliance for each term and condition is the method specified in the RO Permit, unless otherwise indicated and described on the enclosed deviation report(s).

**Semi-Annual (or More Frequent) Report Certification (General Condition No. 23 of the RO Permit)**  
Reporting period (provide inclusive dates): From \_\_\_\_\_ To \_\_\_\_\_  
 1. During the entire reporting period, ALL monitoring and associated recordkeeping requirements in the RO Permit were met and no deviations from these requirements or any other terms or conditions occurred.  
 2. During the entire reporting period, all monitoring and associated recordkeeping requirements in the RO Permit were met and no deviations from these requirements or any other terms or conditions occurred, EXCEPT for the deviations identified on the enclosed deviation report(s).

**Other Report Certification**  
Reporting period (provide inclusive dates): From 04/01/16 To 06/30/16  
Additional monitoring reports or other applicable documents required by the RO Permit are attached as described:  
Compliance Test Report, CGA for Press and Dryer VOC monitors and Dryer CO monitor.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this report and the supporting enclosures are true, accurate and complete.

Rina Allen Plant Manager (989) 348-3401  
Name of Responsible Official (print or type) Title Phone Number  
Rina Allen Signature of Responsible Official 6/24/16 Date

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**JUN 30 2016**

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## 1.0 INTRODUCTION

Cylinder Gas Audit (CGA) testing was conducted by Weyerhaeuser personnel on the gaseous emissions monitors servicing the Dryer RTO Stack and Press Stack. These tests involved the volatile organic compound (VOC) monitoring system on the Press Biofilter exhaust, and the carbon monoxide (CO) and VOC monitoring systems for the Dryer RO exhaust. Monitor audits were conducted on June 15, 2016, satisfying the quality assurance/quality control requirements for these monitoring systems for the second quarter of 2016.

## 2.0 SUMMARY OF RESULTS

The results of the three CGA Tests are provided in Appendix A of this report. The results present the times for each of the tests, calibration gas concentrations and monitoring system responses. Calculations of CGA Accuracies are provided in Appendix B. All accuracies were within the allowable limit of plus or minus (+/-) 5% for VOC (EPA/530-SW-91-010, Sec.2.2.4.7) and plus or minus (+/-) 15% for CO (40CFR60, App. F, Sec. 5.2.3 (2)). The results are summarized in the table below.

**Emissions Monitor CGA Accuracies**  
**Weyerhaeuser, Grayling**

Monitor	Audit Point		
	Zero	Mid	High
Press VOC Monitor	0.01%	0.15%	0.20%
Dryer VOC Monitor (Low Range)	0.03%	0.00%	0.00%
Dryer VOC Monitor (High Range)	NA	0.04%	0.49%
Dryer CO Monitor	NA	2.60%	0.76%

## **3.0 PROCEDURES**

### **3.1 Methods**

The procedures outlined in USEPA Publication EPA/530-SW-91-010, "Methods Manual for Compliance with the BIF Regulations", Section 2.2.6.3, "Calibration Error Test Procedure" were used for auditing the Press and Dryer VOC monitors. The procedures outlined in 40 CFR 60, Appendix F, Section 5.1.2 were used for auditing the Dryer CO monitor.

### **3.2 Cylinder Gas Audit**

All of the monitors were challenged with audit gases of known concentration at three (3) points. Audit gases were introduced three (3) times at each audit point for a sufficient period of time to assure that adsorption/desorption of the sample transport surfaces had stabilized. Each monitor operated in the normal sampling mode during the audit. Audit gasses were introduced to the monitor calibration gas line, which delivered the audit gas to the sampling system at a point between the stack sample probe and sample line. A flow meter was used to assure that the audit gas into the monitors was confirmed to be that of the normal value.

The Dryer CO monitor was challenged with 278 ppm, 128.3 ppm, and zero gases. The Dryer VOC monitor was challenged with 742.6 ppm, 352.1 ppm, 75.37 ppm, 34.93 ppm and zero gas in order to completely audit both spans of this dual range instrument. The press VOC monitor was audited against gases of 81.53 ppm, 34.95 ppm and zero. All audit gases were prepared in accordance with EPA Traceability Protocol No. 1. Certificates of analysis for these gases are provided in Appendix C of this report.

### **3.3 Calculations**

Calibration Error calculations for the VOC monitors followed EPA/530-SW-91-010, "Methods Manual for Compliance with the BIF Regulations", Section 2.2.6.3.2. Calculations for the CO monitor followed 40 CFR 60, Appendix F, Section 6.3.