



BENEFITS AND OVERVIEW OF THE ELECTRONIC REPORTING TOOL (ERT)

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MACTEC

Overview

- Introduction
- Emissions Reporting Tool Overview
- Conclusions

Introduction

- Test Plan
- Test Report
- Emission Factor Development
- Why ERT

What is ERT

➤ Microsoft Access Application

➤ Methods

- Methods 1 through 4, 3A, 5, 6C, 7E, 10, 17, 25A, 26A, 29, 101, 101A, 201A, 202, CTM-039 & CTM-040

➤ Pollutants

- Filterable PM, Condensable PM, PM10, PM2.5, CO, Chlorine, Chloride, HCl, Total Chloride, NOx, SO2, Metals (Sb, As, B, Be, Cd, Cr, Co, Cu, Pb, Mn, Hg, Ni, P, Se, Ag, Th and Zn), TOC (as C, CH4, C2H6, C3H8)

➤ Electronic Test Report

ERT Provides

- **Key information**
- **Coordination**
- **Data quality**
- **Standards**

ERT Reduces

- **Workload**
- **Required resources**
- **Redundancy**

How ERT is used by the Source

- Test plan
- Test report

Test Plan - Facility/Tester Screen

Test Plan [Minimize] [Maximize] [Close]

Test Plan Title: Emissions Testing of Wood Chip Dryer 2 **Test Plan Date:** 5/25/2005

Facility/Tester Permit/SCC Regulations Process/APCD Locations/Methods Methods cont. Audit/Calibrations Schedule Signatures Attach.

Facility Name:
Environ Mental Concious Furniture Co.

Address: 666 66th St N Ave **AFS Number:** _____

City: Boisenberry **Industry NAICS:** 30701415

State/Zip: NC 27854-4866 **FRS:** 27562

Contact: Enviro M. Concious **Lat/Long:** _____

Phone: (919) 666-2626 **Lat/Long:** _____

Fax: (919) 666-6262

email: enviro.concious@enviroconcious.com

Testing Company:
Emissions Factors & Policy Applications Group

Address: OAQPS/EMAD (C312-02)

City: Research Triangle Park

State/Zip: NC 27711

Contact: Ronald E. Myers

Phone: (919) 541-5407

Fax: (919) 541-1065

email: myers.ron@epa.gov

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Test Plan – Permit/SCC Screen

Test Plan [Minimize] [Maximize] [Close]

Test Plan Title: Emissions Testing of Wood Chip Dryer 2 **Test Plan Date:** 5/25/2005

Facility/Tester Permit/SCC Regulations Process/APCD Locations/Methods Methods cont. Audit/Calibrations Schedule Signatures Attach.

Air Permit Number: NC666-1234

Permitted State Source ID/Name: DR2 Dryer 2

Permitted Maximum Process Rate: 175 Tons per Hour

Maximum Normal Operation Process Rate: 150 Tons per Hour

Target Process Rate for Testing: 125 Tons per Hour

SCC:

Select SCC from list

SCC/Desc.: 30701001 Industrial Processes - Pulp and Paper and Wood Products - Oriented Strandboard (OSB) Manufacture - Direct Wood-fired Rotary Dryer, Unspecified Pines

Target Parameter: Oven-dried Wood Produced **Process Rate:** Tons/million BTU using C

U (+/-): 0 **Pollutant Unit of Measure:** Lb/million BTU using O2

U Desc.:

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Test Plan - Attachments Screen

Test Plan [Minimize] [Maximize] [Close]

Test Plan Title: Emissions Testing of Wood Chip Dryer 2 **Test Plan Date:** 5/25/2007

Facility/Tester | Permit/SCC | Regulations | Process/APCD | Locations/Methods | Methods cont. | Audit/Calibrations | Schedule | Signatures | Attach.

Please enter attachments.

Attachment Description:	Attachment (right click to insert file):
▶ Source/Process Flow Diagram	Package
Alternate Method Reques and Approval (Item 8) (optional)	Adobe Acrobat 7.0 Document
EPA Method 1 Location Supporting Documentation (Item 9) (optional)	
Cyclonic Flow Absence Supporting Documentation (Item 10)	
Pre-Test Meter Boxes/DGMS Calibrations	Adobe Acrobat 7.0 Document
Post-Test Meter Boxes/DGMS Calibrations	
Nozzles Calibrations	
Pitots Calibrations	
Thermocouples Calibrations	
Sampling Locations Dimensions and Point Locations	Package
Run Field Data Sheets	
Moisture Recovery	
Lab Data	
Chain-of-Custody	
Observer Comments	
APCD Diagram	Package
*	

Record: [Home] [Left] [1] [Right] [End] [Refresh] of 16

To add an attachment:
- right click on the filename
- select "insert object"
- select "create from file"
- browse to the folder containing the file and select the file

Finished

Test Report - Import Screen

Run Data Details

Facility: Environ Mental Concious Furniture Co.
 Permitted Source ID/Description: DR2 Dryer 2

Select Location - Method: stack - M
 Select Run: Method 25A - St-m25a

Method Setup | Calibrations | ITM Run Re

Compounds for this Location

Location	Te
stack	Total organic co

Import Field Run Data

1. Select Location: stack
 Select Method: Method 29

2. Select Spreadsheet File: D:\EF_redirects\Electronic Reporting Tool\ERT_version3-final\ERT v3

3. View/Edit Imported Records
 4. Add imports into main data table

Printed Reports

- Test Plan
- Test Plan Review
- Test Report
- Test Report
- Report Signatures
- Emission Factor Export

Imported Header Data

Location:	Method:	RunNumber:	RunDate:	JobNumber:	Personnel:	Pb:	Pstatic:	FilterNum1:	FilterNum2:	FilterNum3:	ReagBox:	Umbical:	St
stack	Method 29	M5-1	6/28/2006	JobOne	ews - 54321	30.04	-0.18	0					
stack	Method 29	M5-2	6/28/2006	JobOne	ews - 54321	30.04	-0.18	0					
stack	Method 29	M5-3	6/28/2006	JobOne	ews - 54321	30.04	-0.18	0					

Imported Point Data

Location	Method:	Run #	Job #	Run Date	Point	Begin	End	Clock	Gas Meter	Velocity	Stack Temp	Dry Gas In.	Dry Gas C
stack	Method 29	M5-1	JobOne	6/28/2006	A1	0	4	12:02:00 PM	703.127	0.32	167	79	
stack	Method 29	M5-1	JobOne	6/28/2006	A2	4	8	12:06:00 PM	705.41145	0.32	168	80	
stack	Method 29	M5-1	JobOne	6/28/2006	A3	8	12	12:10:00 PM	707.6959	0.33	169	80	
stack	Method 29	M5-1	JobOne	6/28/2006	A4	12	16	12:14:00 PM	709.98035	0.33	169	81	
stack	Method 29	M5-1	JobOne	6/28/2006	A5	16	20	12:18:00 PM	712.2648	0.27	169	83	
stack	Method 29	M5-1	JobOne	6/28/2006	A6	20	24	12:22:00 PM	714.54925	0.27	169	84	
stack	Method 29	M5-1	JobOne	6/28/2006	A7	24	28	12:26:00 PM	716.8337	0.22	167	86	
stack	Method 29	M5-1	JobOne	6/28/2006	A8	28	32	12:30:00 PM	719.11815	0.22	166	87	
stack	Method 29	M5-1	JobOne	6/28/2006	B1	32	36	12:34:00 PM	721.4026	0.3	164	88	
stack	Method 29	M5-1	JobOne	6/28/2006	B2	36	40	12:38:00 PM	723.68705	0.3	168	89	
stack	Method 29	M5-1	JobOne	6/28/2006	B3	40	44	12:42:00 PM	725.9715	0.31	169	90	
stack	Method 29	M5-1	JobOne	6/28/2006	B4	44	48	12:46:00 PM	728.25595	0.31	169	91	
stack	Method 29	M5-1	JobOne	6/28/2006	B5	48	52	12:50:00 PM	730.5404	0.28	169	92	

Record: 10 of 53

Test Report - Results Screen

Run Data Details

Facility: Environ Mental Concoious Furniture Co.

Permitted Source ID/Description: DR2 Dryer 2

Select Location - Method: stack - Method 29

Select Run: Method 29 - 1

Method Setup | Header Data | Point Data | Lab Data | **Sampling/Stack Data Results** | Cyclone Cut Size | Emissions

Method:	RunNumber:	RunDate:
Method 29	1	12/23/2004

Sampling Train Parameters:		Stack Gas Parameters:			
NetRunTime:	64	% H2O:	37.81	Vs:	34.44
NetTravPts:	16	% H2Osat:	38.04	Dstk:	72
Dn:	0.297	Mfd:	0.6219	Dwdth:	0
Cp:	0.84	% CO2:	7	Dlngth:	0
Y:	0.991	% O2:	13.2	As:	28.274
Pb:	30.04	% CO + N2:	79.8	Qsd:	30,697.9
DeltaH:	1.07	Fo:	1.10	Qaw:	58,425.4
Vm:	36.980	Md:	29.65	MMBtu/Hr:	73.44
tm:	84.66	Ms:	25.25		
Vmstd:	35.762	Pg:	-0.18		
Vlc:	461.9	Ps:	30.03		
Vwstd:	21.74	ts:	167.25		
% I:	107.0	DeltaPavg:	0.278		

Test Report - Emissions Screen

Run Data Details

Facility: Environ Mental Concious Furniture Co.

Permitted Source ID/Description: DR2 Dryer 2

Select Location - Method: stack - Method 29

Add New Run Data Delete Run Data

Select Run: Method 29 - 1 Change Run Number

Method Setup Header Data Point Data Lab Data Sampling/Stack Data Results Cyclone Cut Size Emissions

Method: Method 29 **RunNumber:** 1 **RunDate:** 12/23/2004

	Fwt	Mass_mg	lb/dscf	Compound	gr/dscf
▶	52	20.00	1.2329425E-06	Chromium	0.00863
	207.19	20.00	1.2329425E-06	Lead	0.00863
	54.94	20.00	1.2329425E-06	Manganese	0.00863
	58.71	20.00	1.2329425E-06	Nickel	0.00863
	107.87	20.00	1.2329425E-06	Silver	0.00863
	65.38	20.00	1.2329425E-06	Zinc	0.00863

Record: 1 of 6

How ERT is used by EPA

- Test plan review
- Test report
- Data quality evaluation

ERT Test Plan Review

ERT ... 2

Test Plan Review

Test Plan Title: Emissions Testing of Wood Chip Dryer 2 Test Plan Date: 5/25/2007 State Review Accepted (Y/N)

Facility/Permit Regulations Process/APCD Locations/Methods Methods cont. Audit/Calibrations Schedule Signatures Attach.

8. Describe below or attach complete documentation of all modifications and/or deviations to the applicable test methods. If alternative methods requested, attach documentation of request AND approval, including dates.

Instead of using the procedures prescribed in NC rule 25NC7725-3, we propose using a combination of Method 202 and Method 315 procedures. These include purging with Nitrogen and the use of Methelene Chloride as the extracant. In addition, we propose to use acetone as a finish solvent following the Methelene

Item 8:
 Yes No
Add/View Comment

9. Does the proposed sampling location meet the minimum acceptable measurement sites? Please list below documentation.

10. Has absence of cyclonic flow been verified per EPA absence of cyclonic flow must be verified prior to supporting documentation.

Cyclonic flow will be determined as part of the initial velocity

11. Select the method that will determine the oxygen

M3A-instrumental

Comments:

Test Plan Section: TestInAccordanceDesc

It is suggested but not required to use the dry impinger test method available on the EPA Method 202 FAQ page (<http://www.epa.gov/ttn/emc/methods/method202.html#af>) in lieu of Method 202 as proposed in this plan. If you have questions about the use of this alternative method please contact DEQ.

ERT Data Quality Questions

State Review of Test Report

Facility: Environ Mental Concious Furniture Co.

Permitted Source ID/Description: DR2 Dryer 2

Select Location - Method: stack - Method 29

Process DQGs Run DQGs Average Emissions

Method: Method 29 **RunNumber:** 1 **RunDate:** 12/23/2004

ID	Question	Value (Y/N)
55	Is the posttest leak check presented for each run and does it meet the criteria of < 0.02 cfm?	
56	Is annual and post-test DGM calibration data included in the report? Does DGM calibration data meet the QA specifications?	
57	Is the isokinetic sampling ratio between 90 and 110 %?	
58	Is nozzle calibration data included in the test report? If so, do the nozzle calibrations meet the required QA specifications?	
59	Is the raw field data included in the test report?	
60	Are copies of laboratory data included in the test report, and are the laboratory reports complete and correct?	
61	Are the sample custody records included in the test report?	
62	USE A GRADUATED SCALE BASED ON MGs??? - Is the 3-run or grouped runs RPD < 30% (50%?)	
63	Was the probe temperature within the method specs?	

Use buttons below to change runs:

State Review Run Status: [Dropdown]

Record: [Navigation] 1 of 3

ERT Test Report Review

State Review of Test Report

Facility: Environ Mental Concious Furniture Co.

Permitted Source ID/Description: DR2 Dryer 2

Select Location - Method: stack - Method 29

Process DQQs Run DQQs Average Emissions

Applicable State and Federal Regulations for this Test Report: **Does the data demonstrate compliance?**

Regulation	Compound	Limit	Unit	Compliance
Reg Desc Test PTB	Arsenic	0.002	lb/hr	No

Compound: Arsenic

All Runs for Selected Compound:

RunNumber	RunDate	gr/dscf	Elb/hr
1	12/23/2004	0.00647	1.7032
2	12/23/2004	0.00558	1.5658
3	12/23/2004	0.00857	1.9081

Record: 1 of 3

Record: 7 of 7

Source Benefits

- Streamlined test plans
- Standard Report

States Benefits

- Standard report
- Q/A
- Improved emission factors

ERT Data Applications

- **WebFire**
- **Non-emission factor data flow**
- **Legacy systems**
- **AIRS/AFS**
- **Emission inventory**
- **Emission standards data**
- **State limits (non-Federal, SIP)**
- **Federal NSPS, MACT, NSR/PSD**

Planned Improvements

- **ANPR electronic submission requirements**
- **Data definition standards**
- **CDX**
- **CROMERR**
- **Expanded test methods**

Conclusions

- Paper replacement
- Critical data
- Communication
- Standards
- Efficient
- Improved emission factors