Electronic Reporting Tool

Software to Standardize Source Test Planning, Reporting and Assessment

Ron Myers
OAQPS/SPPD/MPG
5/14/2008

Presentation Topics

- Test Reporting History
- Test Report Workflow
- Test Report Uses
- Emissions Factors Development History
- Problem Areas
- A Solution of One
- Future

History

- 1970's
  - Paper, pencil, nomagraphs, slide rules
- 1980's
  - Paper, pencil, nomagraphs, calculators
- 1990's
  - Paper, pencil, computers

Test Report Workflow

- Draft Plan - paper
- Wait for comment – paper approval
- Conduct test – paper report
- State Agency observes test – paper
- Assess validity of report
  - Transcription of data
- Acceptance of data – paper report
- Report results to EPA
  - Transcription of information

Test Report Uses

- Compliance certification
- ~~Permit applications or revisions~~
- ~~Permit fee determination~~
- ~~Emissions Inventory~~
- ~~Performance Information~~
- ~~Modeling~~
- ~~Risk Assessment~~
- ~~Environmental Justice Issues~~
- ~~TRI – CERCLA – SARA~~
- ~~AIRS AFS reporting~~
- ~~Complaint Evaluations~~

Emissions Factors Development History

- Obtained Source Test Reports
  - EPA obtained or conducted test reports supporting NSPS/NESHAP Standards
  - EPA obtained test reports recovered from State files
  - Test reports supplied to EPA by industry
- EPA reviewed and assessed quality of source test reports
  - Compliance with applicable method for pollutant, completeness of supporting documentation of procedures
  - Evaluation of accuracy of calculations
  - Indication of representativeness of process, process operating conditions, control equipment and control operation.
- EPA categorized source tested by SCC, pollutant tested and controls employed
- EPA summarized test report information and documented quality assessment in background report.
- Typical time used was from 4 to 8 hours per source test.

Areas of Opportunity

- Improve coordination
- Reduce duplicative work
- Standardize reports
- Improve information flow
- Reduce storage space
- Improve documentation
- Improve & standardize QA
- Integrate with multiple program data flows
  - Emissions factors development
  - Emissions Inventory
  - Compliance & Enforcement

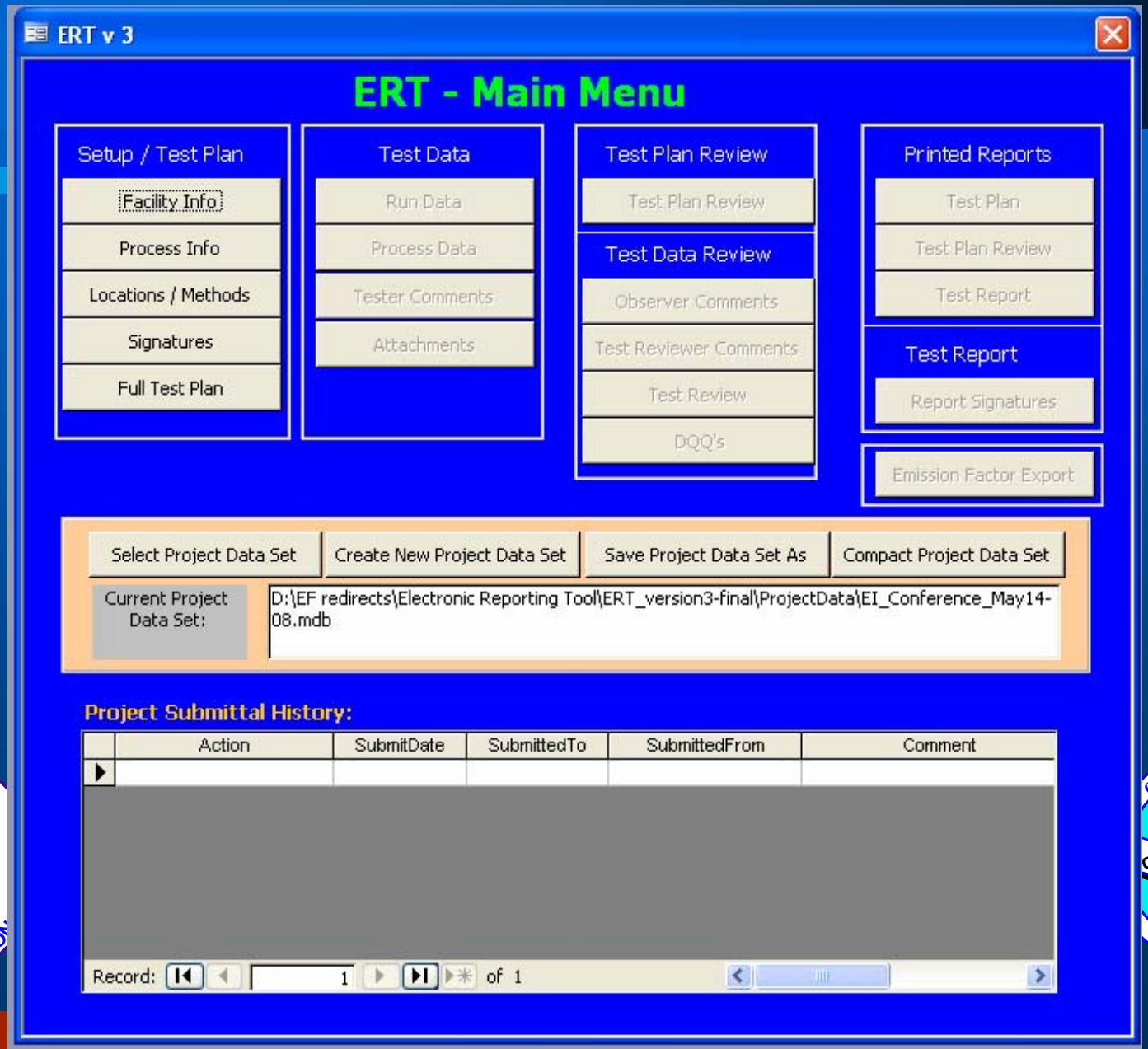
The Electronic Reporting Tool

- Replaces resource intensive manual manipulation of paper reports
- Provides for single location for planning, calibration, field sampling, field inspection, data quality assessment documentation
- Highlights need for most critical data requirements
- Facilitates coordination between source and State
- Standardizes several components of documentation
- Provides for electronic transmission of information

The Electronic Reporting Tool

- **Version 3 Methods**
  - **Methods 1 through 4, 3A, 5, 6C, 7E, 10, 17, 25A, 26A, 29, 101, 101A, 201A, 202, CTM-039 & CTM-040**
- **Version 3 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)**
- **http://www.epa.gov/ttn/chief/ert/ert_tool.html**

New Unpopulated Project Data Set



Blank Test Plan Entry Screen

Test Plan

Test Plan Title:

Test Plan Date:

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

Facility Name:

Address:

City:

State/Zip:

Contact:

Phone:

Fax:

email:

AFS Number:

Industry NAICS:

FRS:

Lat/Long:

Lat/Long:

Testing Company:

Address:

City:

State/Zip:

Contact:

Phone:

Fax:

email:

Next Page

Test Plan

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

City: Boisenberry

State/Zip: NC 27854-4866

Contact: Enviro M. Concious

Phone: (919) 666-2626

Fax: (919) 666-6262

email: enviro.concious@enviroconcious.com

AFS Number:

Industry NAICS: 30701415

FRS: 27562

Lat/Long:

Lat/Long:

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

Next Page

Test Plan

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.:

Next Page

Test Plan

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.

1. What is the specific purpose for the proposed testing?

Determine compliance with NSPS and State SIP emissions limitations
Establish CAM monitoring parameters as stated in Title V permit

2. List all state and federal regulations that apply to the proposed testing:

RegDesc	Compound	Limit	Unit
Reg Desc Test PTB	Arsenic	0.002	lb/hr
		0	

Record: 1 of 1

3. Will the test results be used for other regulatory purposes (e.g., emission inventories, permit applications, etc.) beyond that stated above? If yes, explain.

Results will be used for establishing total PM (filterable and condensable) emissions as required by State for Consolodated Emissions Reporting

Next Page

Test Plan

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.

4a. Enter the process data to be documented during testing. (note: required before test data entry)

Process Parameter	Units	TargetValue	comments
Oven-dried Wood Produced	s/million BTU using	0	
PTB Test Stuff	dfjkd	90	
Oxygen Concentration	percent	4	

Record: 1 of 7

4b. Enter the process lab data to be documented during testing. (note: required before test data entry)

Analysis Required	Units	Comments
Wood Moisture Content of feed material	percent	
Wood Moisture Content of product	percent	
Wood density of feed material	lb/ton	
Wood density of product	lb/ton	

Record: 1 of 4

5a. Please give a brief description of the source (including control equipment) and attach source or process flow diagram: Attach File

"""PROCESS DESCRIPTION
Figure 2-1 illustrates the basic processing steps for OSB production. The steps are:
Logs are slashed, debarked, cut into shorter lengths, and sliced into thin wafers.

5b. Control Devices: (note: required before test data entry)

Control Device Parameters
FABRIC FILTER
FABRIC FILTER - MEDIUM TEMPERATURE, I.E. 180F<T<25
BOILER AT LANDFILL

Record: 1 of 4

Column widths may be changed by user.

Next Page

Test Plan

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.

6. Please enter sampling location information. (all dimensions in inches)

(note: required before test data entry)

Location	Num. Points	# of Ports	Rnd. Duct Diam.	Duct Len.	Duct Width	Equiv. Diam.	Up Stream Dist
Inlet	16	2	19.5	0	0	0	280
stack	16	2	72	0	0	0	280

Record: 1 of 2

(Note: UpStreamDist = Distance from upstream disturbance
DwnStreamDist = Distance from downstream distuburbance)

7a. Please provide the following information for each test parameter.

(note: required before test data entry)

Add Target Parameters

Location	Target Parameter	Test Method	Num Test Runs	Test Run Duration	Cc
Inlet	Arsenic	Method 29	3	64	
Inlet	Cadmium	Method 29	3	64	
stack	Chromium	Method 29	3	64	
stack	Lead	Method 29	3	64	
stack	Nickel	Method 29	3	64	

Record: 1 of 10

7b. Please select the Emissions / Concentrations for each location.

Add Emissions/Concentrations

Location:	Method:	Emission/Concentration:	Corrected Analyte:	Corrected %:
Inlet	Method 29	lb/million BTU using CO2		0
Inlet	asdfsdf	grains/dscf		0
Inlet	asdfsdf	lb/hr		0
Inlet	asdfsdf	lb/million BTU using O2		0
Inlet	asdfsdf	mg/dscm		0

Record: 1 of 12

Next Page

Test Plan

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.

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

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

9. Does the proposed sampling location meet the minimum EPA Method 1 criteria for acceptable measurement sites? Please list below or attach the supporting documentation. Attach File

☐ Yes ☑ No

10. Has absence of cyclonic flow been verified per EPA Method 1 (Section 2.4)? If no, absence of cyclonic flow must be verified prior to testing. If yes, please attach supporting documentation. Attach File

☐ Yes ☑ No

Cyclonic flow will be determined as part of the initial velocity traverse

11. Select the method that will determine the oxygen concentration :

M3A-instrumental

Next Page

Test Plan

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.

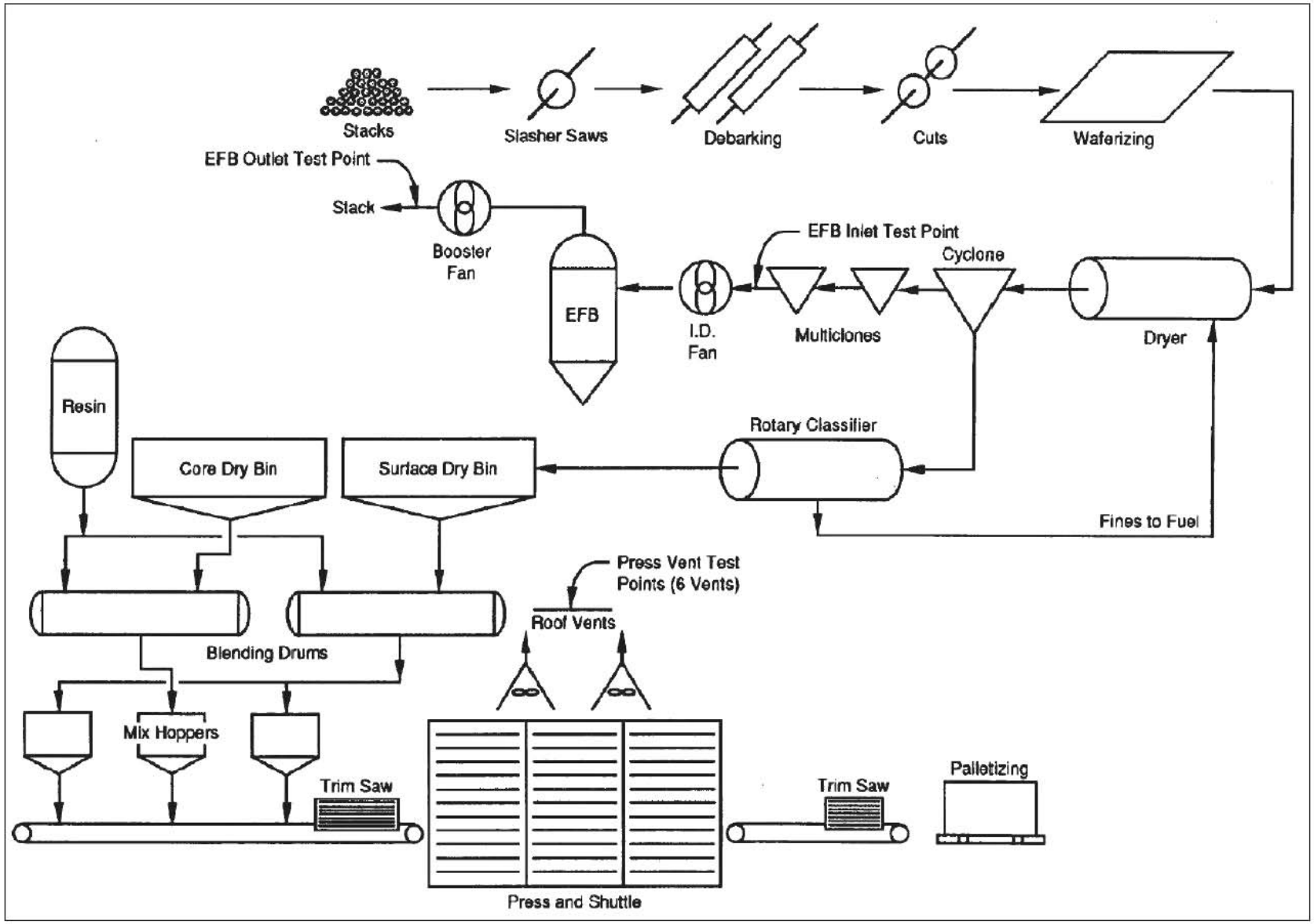
Attachment Description:	Attachment (right click to insert file):
Source/Process Flow Diagram	Package
Alternate Method Reques and Approval (Item 8) (optional)	Adobe Acrobat 7.0 Document
EPA Method 1Location Supporting Documentation (Item 9) (optional)	
Cyclonic Flow Absence Supporting Documentation (Item 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: 1 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

D__EFREDI-1_ELECTR-1_ERT_VE-1_PROJEC-1_OSBPRO-1[1].JPG - Windows Picture and Fax Viewer



Test Plan Review

- Provides test contractor feed back on information needed prior to test
- Allows State/local agency evaluation of proposed test program.
- Notifies State/local agency of test date and special access requirements.
- Allows for linked and improved documentation of acceptance or comments.

Test Plan Review

Test Plan Title: Emissions Testing of Wood Chip Dryer 2

Test Plan Date: 5/25/2005

State Review Accepted (Y/N)

Facility/Permit | 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

City: Boisenberry

State/Zip: NC 27854-4866

Contact: Enviro M. Concious

Phone: (919) 666-2626

Fax: (919) 666-6262

email: enviro.concious@enviroconcious.com

Industry /SCC/NAIS: 30701415

FINS: 27562

Latitude:

Longitude:

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

SCC/Desc.: 30701001

Industrial Processes - Pulp and Paper and Wood Products - Oriented Strandboard (OSB) Manufacture - Direct Wood-fired Rotary Dryer, Unspecified Pines

Facility Info: ☐ Yes ☑ No

Add/View Comment

Test Co. Info: ☐ Yes ☑ No

Add/View Comment

Source info: ☐ Yes ☑ No

Add/View Comment

Air Permit Number: NC666-1234

Permitted Source ID and 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

Next Page

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 minin
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 velocit

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.

Field data collection

- Use Excel spreadsheet application used my many contractors
  - Modified to extract critical information into the ERT Access application
- ERT application duplicates calculations in spreadsheet program using equations from FR methods

Microsoft Excel - ERT v3 Spreadsheet.xls

File Edit View Insert Format Tools Data Window DPlot Help Adobe PDF

Reply with Changes... End Review...

AB46 =IF(H46<0.000001,"",85.49*Cp*$AJ46*((460+$I46)/((Pb+Psg/13.6)*Ms))^0.5)

Plant	EPA AP-42 Procedure Revamp	Run No. M5-1	Date 6/28/2006	Job # JobOne	
Address	RTP, NC				
Location	Stack Extension				
Personnel	ews - 54321				

Equipment ID		Cal	
Reag. Box		Samp. box	
Umbical		Meter box	
Stack TC		TC Reado	
Tedlar Bag		Pitot	
Orsat Pump		Nozzle	
Est. Moisture	6.4	gm H_2O	50.0
		B_{ws} meas	6.2
		B_{ws} sat	38.0

Constants		
A_n foot^2	1.07	
Y	0.991	
$\Delta H_@$	2.050	
C_p	0.840	
D_H in inches	0.260	
Orsat	8.1	%CO_2
	9.9	%O_2
Fo=	1.358	F_d= 9190

Checks	Pre	Mid	Post
Vacuum		0	
Init DGM		0.000	
Final DGM		0.000	
Leak rate		0	
Pitot			
Nozzle			
Stack TC			
Ms	28.97	M_d	29.69

% Moisture	6.2	Meas
P_{Br} in "Hg	30.04	
P static in H_2O	-0.18	
K factor	4.4	
Filter #		
Filter Wt.		

Traverse Point No.	Elapsed Time In Minutes Begin	End	Clock Time 24 hr	Gas Meter Reading	Velocity ΔP	Stack Temp. °F	Dry Gas Meter Temperature inlet	Outlet	Orifice Pressure ΔH in H_2O Desired	Actual	Probe Temp. °F	Filter Temp. °F	Imping. Temp. °F	Pump Vac. Hg	Notes
A1	0.0	4.0	12:02	703.127	0.320	167	79	79	1.40	1.20					
A2	4.0	8.0	12:06	705.411	0.320	168	80	79	1.40	1.20					
A3	8.0	12.0	12:10	707.696	0.330	169	80	79	1.44	1.25					
A4	12.0	16.0	12:14	709.980	0.330	169	81	79	1.44	1.25					
A5	16.0	20.0	12:18	712.265	0.270	169	83	79	1.18	1.02					
A6	20.0	24.0	12:22	714.549	0.270	169	84	80	1.18	1.02					
A7	24.0	28.0	12:26	716.834	0.220	167	86	80	0.96	0.83					
A8	28.0	32.0	12:30	719.118	0.220	166	87	81	0.96	0.83					
B1	32.0	36.0	12:34	721.403	0.300	164	88	83	1.31	1.15					
B2	36.0	40.0	12:38	723.687	0.300	168	89	84	1.31	1.15					
B3	40.0	44.0	12:42	725.972	0.310	169	90	84	1.36	1.20					
B4	44.0	48.0	12:46	728.256	0.310	169	91	85	1.36	1.20					
B5	48.0	52.0	12:50	730.540	0.280	169	92	85	1.22	1.10					
B6	52.0	56.0	12:54	732.825	0.280	169	93	86	1.22	1.10					
B7	56.0	60.0	12:58	735.109	0.210	162	94	87	0.92	0.80					
B8	60.0	64.0	13:02	737.609	0.210	162	94	88	0.92	0.80					
		64.0	13:02	740.109											
		64.0	13:02												
		64.0	13:02												
		64.0	13:02												
		64.0	13:02												
		64.0	13:02												
		64.0	13:02												
		64.0	13:02												
		64.0	13:02												
		64.0	13:02												
		64.0	13:02												
		64.0	13:02												
		64.0	13:02												
		64.0	13:02												

Start	Estimated					
Fo	Fo Min	Fo Avg	Fo Max	combustion, enter correct Fo factor	Fd	
Gas	1.600	1.70	1.836			8710
Oil	1.210	1.30	1.413		9190	9190
Coal	1.083	1.16	1.230			9780
Ligsite/woo	1.016	1.07	1.130	1.360		9860
Wetbulb temp, Estimate			100.0			
Δp average			0.300			
Tm			80			
Ts			168			
Dn needed			0.281			

Individual % iso	Y_{qa}	Vmstd	vs	VOC ppm C	NO_x ppm	CO ppm	Saturated %Moisture	Wetbulb Moisture	Wetbulb Temp	√ΔP
92.3	0.920	2.233	34.49				37.8			0.566
92.3	0.921	2.231	34.52				38.7			0.566
90.9	0.926	2.231	35.08				39.6			0.574
90.9	0.926	2.229	35.08				39.6			0.574
100.2	0.923	2.224	31.73				39.6			0.520
100.0	0.923	2.220	31.73				39.6			0.520
110.4	0.919	2.215	28.60				37.8			0.469
110.1	0.918	2.211	28.57				37.0			0.469
93.9	0.923	2.206	33.31				35.3			0.548
94.1	0.925	2.202	33.42				38.7			0.548
92.5	0.930	2.200	34.00				39.6			0.557
92.4	0.929	2.196	34.00				39.6			0.557
97.1	0.935	2.194	32.31				39.6			0.529
96.9	0.934	2.190	32.31				39.6			0.529
121.5	0.914	2.390	27.83				33.6			0.458
121.3	0.913	2.388	27.83				33.6			0.458

Carbon Monox			
Cylender ID	Level	Tag Value	Resp Pre
	Zero		
	Low		
	Mid		6
	High		
CO-lb/hr		lb/mmBTU	

Non Methane - VOC as Carbon Ca			
Cylender ID	Level	Tag value ppm	Pre
	Zero		
	Low		
	Mid	580	5
	High		7
VOC-lb/hr		lb/mmBTU	
Methane		1	
Drg NonCH4 VOC, ppm			
VOC MW/C		16	

NO_x			
Cylender ID	Level	Tag value ppm	Pre
	Zero	0	
	Low		
	Mid	20	19
	High		4

Revision History / ImportedDataHighlighted / Method 1 / Data Sheet 1 / Data Sheet 2 / Data Sheet 3 / CalculationsNew / Summary / Calculations / Table 1 / HeaderE

Ready NUM

Run Data Details

Facility: Environ Mental Concious Furniture Co.

Permitted Source ID/Description: DR2 | Dryer 2

Select Location - Method: stack - Method 25A

Add New Run Data | Delete Run Data

Select Run: Method 25A - St-m25a-1

Change Run Number

Method Setup | Calibrations | ITM Run Results | Emissions

Compounds for this Location / Method: ITM

Location	Target Parameter
stack	Total organic compounds (TOC)

Record: 1 of 1

Add Target Parameters

Emissions / Concentrations for this Location / Method:

Location:	Method:	Emission/Concentration:	Corrected Analyte:	Corrected %:
stack	Method 25A	lb/hr		0

Record: 1 of 1

Add Emissions/Concentrations

Import Field Run Data

1. Select Location

Select Method

2. Select Spreadsheet File

3. View/Edit Imported Records

4. Add imports into main data table

Printed Reports

Test Plan

Comment

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	Ta
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	

Record: 10 of 53

Test Report Data in ERT

- Field test information is only stack gas information
- Laboratory data added to report
- Process data added to report
- Control device data added to report

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

Point	BeginTime	EndTime	Clock	GasMeter	DeltaP	StackTemp	DryGasInlet
A1	0	4	12:02:00 PM	703.127	0.32	167	79
A2	4	8	12:06:00 PM	705.411	0.32	168	80
A3	8	12	12:10:00 PM	707.696	0.33	169	80
A4	12	16	12:14:00 PM	709.980	0.33	169	81
A5	16	20	12:18:00 PM	712.265	0.27	169	83
A6	20	24	12:22:00 PM	714.549	0.27	169	84
A7	24	28	12:26:00 PM	716.834	0.22	167	86
A8	28	32	12:30:00 PM	719.118	0.22	166	87
B1	32	36	12:41:00 PM	721.403	0.3	164	88
B2	36	40	12:45:00 PM	723.687	0.3	168	89
B3	40	44	12:49:00 PM	725.972	0.31	169	90
B4	44	48	12:53:00 PM	728.256	0.31	169	91
B5	48	52	12:57:00 PM	730.540	0.28	169	92
B6	52	56	1:01:00 PM	732.825	0.28	169	93

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

Sampling Train Parameters:

NetRunTime:	64
NetTravPts:	16
Dn:	0.297
Cp:	0.84
Y:	0.991
Pb:	30.04
DeltaH:	1.07
Vm:	36.980
tm:	84.66
Vmstd:	35.762
Vlc:	461.9
Vwstd:	21.74
% I:	107.0

Stack Gas Parameters:

% H20:	37.81	Vs:	34.44
% H20sat:	38.04	Dstk:	72
Mfd:	0.6219	Dwdth:	0
% CO2:	7	Dlngth:	0
% O2:	13.2	As:	28.274
% CO + N2:	79.8	Qsd:	30,697.9
Fo:	1.10	Qaw:	58,425.4
Md:	29.65	MMBtu/Hr:	73.44
Ms:	25.25		
Pg:	-0.18		
Ps:	30.03		
ts:	167.25		
DeltaPavg:	0.278		

View All Runs

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

Test Report Data Quality Evaluation

- Evaluates primarily the availability of documentation of critical instrument calibration and field data elements
- Evaluates compliance with published FR test method requirements

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

Method:	RunNumber:	RunDate:
Method 29	1	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:

Record: 1 of 3

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

Open Discussion

- **QUESTIONS?**