

Electronic Reporting Tool

Software to Standardize
Source Test Planning, Reporting
and Assessment

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OAQPS/SPPD/MPG

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Presentation Topics

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



History

- 1970's
 - Paper, pencil, nomographs, slide rules
- 1980's
 - Paper, pencil, nomographs, 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~~



Areas of Opportunity

- Improve coordination
- Reduce duplicative work
- Standardize reports
- Improve information flow
- Reduce storage space
- Improve documentation
- Improve & standardize QA



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





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

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

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 Consolidated Emissions Reporting

Next Page

Test Plan

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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	Target/Value	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 disturbance)

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 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)

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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

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:

Method 29

RunNumber:

1

RunDate:

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:

% H2O:	37.81	Vs:	34.44
% H2Osat:	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



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 DQOs Run DQOs 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:

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 DQs Run DQs 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

All Runs for Selected Compound:

Compound: Arsenic

	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?

