

Note: This is a reference cited in AP 42, *Compilation of Air Pollutant Emission Factors, Volume I Stationary Point and Area Sources*. AP42 is located on the EPA web site at www.epa.gov/ttn/chief/ap42/

The file name refers to the reference number, the AP42 chapter and section. The file name "ref02_c01s02.pdf" would mean the reference is from AP42 chapter 1 section 2. The reference may be from a previous version of the section and no longer cited. The primary source should always be checked.



Route 8, Box 8263
Hayward, Wisconsin 54843
715/634-3332
FAX: 715/634-5117
November 5, 1996

Director, Air Enforcement Division
U.S. EPA
Ariel Rios Building, Room 1119
Mail Code 2242A
12th Street and Pennsylvania Ave., N.W.
Washington, D.C. 20004

Mr. Laxmi Kesari
Multi-Media Enforcement & Strategic Planning Division
U.S. EPA
401 M. Street SW
Mail Code 2248A
Washington, D.C. 20460

re: United States v. Louisiana-Pacific Corporation
No. CV93-0869(W.D. La)

subject: Sagola, MI Acceptance Testing

Dear Sir/Madam:

Upon review of the compliance test results for Louisiana-Pacific's Oriented Strand Board (OSB) facility located near Sagola, MI, it was determined that the test report was in error. The VOC emissions reported from the dryer regenerative thermal oxidizer (RTO) outlet were not converted from propane to a single carbon; therefore, the emission rate of 4.2 lb/hr from the dryer RTO has been revised to 14.6 lb/hr.

This revision did not effect the compliance status, as the destruction removal efficiency (DRE) $(1 - (14.6/476))$ is 97%. This demonstrates compliance with the 95% limit as stated in the First Amendment to the Consent Decree.

Please find the enclosed copy of the revision to the test report.

If you have any questions or comments, please feel free to contact me.

Sincerely,

Keith Seelig
Environmental Manager
North Central Division

cc w/enc: Julie Domike - U.S. EPA, Air Toxics, New Source Review and Permit
Kim Armbruster - MI DEQ, Air Quality Division

<u>PARAMETER</u>	<u>MEASURED</u>
<u>DRYER PRIMARY CYCLONE EXHAUST 3</u>	
Particulate	
DRY + WET CATCH (GR/DSCF)	0.303
. (LB/HR)	70
DRY CATCH ONLY (GR/DSCF)	0.198
. (LB/HR)	46
Oxides of Nitrogen	
. (ppm,d)	47
. (LB/HR)	9.0
Carbon Monoxide	
. (ppm,d)	1744
. (LB/HR)	204
Total Hydrocarbons	
. (ppmC,w)	3189
. (LBC/HR)	209
Formaldehyde	
. (ppm,d)	12
. (LB/HR)	1.5
<u>E-TUBE OUTLET</u>	
Particulate	
DRY + WET CATCH (GR/DSCF)	0.0417
. (LB/HR)	37
DRY CATCH ONLY (GR/DSCF)	0.00829
. (LB/HR)	7.3
Oxides of Nitrogen	
. (ppm,d)	2.4
. (LB/HR)	1.8
Carbon Monoxide	
. (ppm,d)	1836
. (LB/HR)	826
Opacity (%)	*
<u>DRYER RTO OUTLET</u>	
Particulate	
DRY + WET CATCH (GR/DSCF)	0.00635
. (LB/HR)	5.5
DRY CATCH ONLY (GR/DSCF)	0.00228
. (LB/HR)	2.0
Oxides of Nitrogen	
. (ppm,d)	2.8
. (LB/HR)	2.0
Carbon Monoxide	
. (ppm,d)	229
. (LB/HR)	100
Total Hydrocarbons	
. (ppmC,w)	59.9
. (LBC/HR)	14.6
Formaldehyde	
. (ppm,d)	2.5
. (LB/HR)	1.2

* Visible emission determinations were unable to be performed due to inclement weather conditions.

Table 9. Summary of the Results of the July 23 - 25, 1996 Total Hydrocarbons Emission Compliance Tests at the Louisiana Pacific Plant in Sagola, Michigan.

	Time	Concentration	Emission Rate
Date	(HRS)	(ppmC,w)	(LBC/HR)
Primary Cyclone Exhaust 1			
7-23-96	1435-1535	1937	129
7-23-96	1645-1745	1796	120
7-23-96	1925-2025	1677	112
Avg		1803	121
Primary Cyclone Exhaust 2			
7-23-96	1435-1535	2165	153
7-23-96	1645-1745	2125	153
7-23-96	1925-2025	1840	133
Avg		2043	146
Primary Cyclone Exhaust 3			
7-23-96	1435-1535	3498	237
7-23-96	1645-1745	2595	167
7-23-96	1925-2025	3474	223
Avg		3189	209
Dryer RTO Stack*			
7-23-96	1435-1535	82.1	19.9
7-23-96	1645-1745	32.5	8.0
7-23-96	1925-2025	65.1	16.0
Avg		59.9	14.6
Press Inlet			
7-25-96	1620-1720	705	88
7-25-96	1800-1900	764	101
7-25-96	1934-2034	744	104
Avg		738	98
Press Stack*			
7-25-96	1620-1720	11.9	1.8
7-25-96	1800-1900	19.4	2.9
7-25-96	1934-2034	6.8	1.0
Avg		12.7	1.9

* TGNMOs = corrected for methane

Interpoll Labs Report No. 6-8024
Louisiana Pacific Corporation
Sagola, Michigan

Test No. 2
Dryer RTO Stack

Results of Total Hydrocarbons Determinations-----**Method 25A**

	Run 1	Run 2	Run 3
Date of run	7-23-96	7-23-96	7-23-96
Time run start/end (HRS)	1435-1535	1645-1745	1925-2025
Total sampling time (MIN)	60	60	60
Moisture content (%V/V)	22.9	23.5	23.5
Oxygen content (%V/V)	17.3	17.3	17.3
Volumetric flow rate (DSCFM)	99560	100405	100405
THC concentration			
ppmC,wet (as carbon)	82.1	32.5	65.1
THC emission rate (LB/HR)	19.9	8.0	16.0

Interpoll Labs Report No. 6-8024
Louisiana Pacific Corporation
Sagola, Michigan

Test No. 8
Press RTO Stack

Results of Total Hydrocarbons Determinations **Method 25A**

	Run 1	Run 2	Run 3
Date of run	7-25-96	7-25-96	7-25-96
Time run start/end (HRS)	1620-1720	1800-1900	1934-2034
Total sampling time (MIN)	60	60	60
Moisture content (%V/V)	2.9	3.3	3.4
Oxygen content (%V/V)	20.9	20.9	20.9
Volumetric flow rate (DSCFM)	77990	76250	77090
THC concentration			
ppmC,wet (as carbon)	11.9	19.4	6.8
THC emission rate (LB/HR)	1.8	2.9	1.0

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LOUISIANA PACIFIC - SAGOLA					Report No. 6-8024				
Sagola, Michigan									
Gas Concentration Correction Calculations									
PCE#1		THC Calculations							
	C _{bar}				C _{ma}				
	OUR CONC	ZERO	ZERO		CONC	Upscale	Upscale		
RUN #	(ppm,w)	(Final)	(Initial)	C _o	(Upscale)	(Final)	(Initial)	C _m	C _{gas}
2	665.39	8.6	1	4.80	287	310	287	299	645.52
3	580.81	2.4	0	1.20	287	270	288	279	598.81
4	547.44	7.65	2.4	5.03	287	280	287	284	559.02
PCE #2									
	C _{bar}				C _{ma}				
	OUR CONC	ZERO	ZERO		CONC	Upscale	Upscale		
RUN #	(ppm,w)	(Final)	(Initial)	C _o	(Upscale)	(Final)	(Initial)	C _m	C _{gas}
2	705.39	5.5	1	3.25	287	282	283	283	721.63
3	694.91	4	1	2.50	287	282	284	283	708.46
4	586.96	4	1	2.50	287	270	282	276	613.31
PCE #3									
	C _{bar}				C _{ma}				
	OUR CONC	ZERO	ZERO		CONC	Upscale	Upscale		
RUN #	(ppm,w)	(Final)	(Initial)	C _o	(Upscale)	(Final)	(Initial)	C _m	C _{gas}
2	1124.87	1	2	1.50	287	269	287	278	1166.03
3	844.41	10	0	5.00	287	280	287	284	865.03
4	1143.93	0	0	0.00	287	284	283	284	1158.05
Dryer RTO Stack									
	C _{bar}				C _{ma}				
	OUR CONC	ZERO	ZERO		CONC	Upscale	Upscale		
RUN #	(ppm,w)	(Final)	(Initial)	C _o	(Upscale)	(Final)	(Initial)	C _m	C _{gas}
2	27.37	0	0	0.00	30	27	30	29	28.81
3	12.36	1	0	0.50	30	29	30	30	12.27
4	22.21	2	0	1.00	30	27	30	29	23.14
Press RTO Inlet									
	C _{bar}				C _{ma}				
	OUR CONC	ZERO	ZERO		CONC	Upscale	Upscale		
RUN #	(ppm,w)	(Final)	(Initial)	C _o	(Upscale)	(Final)	(Initial)	C _m	C _{gas}
1	233.39	0	0	0.00	285	281	285	283	235.04
2	255.7	1	0	0.50	285	287	285	286	254.75
3	252.27	0	0	0.00	285	292	287	290	248.35
Press RTO Stack									
	C _{bar}				C _{ma}				
	OUR CONC	ZERO	ZERO		CONC	Upscale	Upscale		
RUN #	(ppm,w)	(Final)	(Initial)	C _o	(Upscale)	(Final)	(Initial)	C _m	C _{gas}
1	6.30	0	0.4	0.20	30.4	28.6	30.7	30	6.30
2	8.45	0	0	0.00	30.4	28.8	29.5	29	8.81
3	5.11	1.5	0	0.75	30.4	29.2	30.0	30	4.59



Louisiana-Pacific Corporation

Route 8, Box 8263
Hayward, Wisconsin 54843
715/634-3332
FAX: 715/634-5117

September 16, 1996

Via UPS Overnight

Director, Air Enforcement Division
U.S. EPA
Ariel Rios Building, Room 1119
Mail Code 2242A
12th Street and Pennsylvania Ave., N.W.
Washington, D.C. 20004

✓ Mr. Laxmi Kessari
Multi-Media Enforcement & Strategic Planning Division
U.S. EPA
401 M. Street SW
Mail Code 2248A
Washington, D.C. 20460

re: United States v. Louisiana-Pacific Corporation.
No. CV93-0869(W.D. La)

subject: Sagola, MI Acceptance Testing

Dear Sir/Madam:

Please find the enclosed compliance test results for *Volatile Organic Compounds (VOC)* and *Particulate Emission* at Louisiana-Pacific's Sagola, MI oriented strand board facility. This test report is in conformance with the First Amendment to the Consent Decree.

The test report demonstrates the pollution control equipment on the dryer system and press system to be effectively controlling particulate and VOC emissions as required in the First Amendment to the Consent Decree.

These results show the dryer system pollution control equipment achieving approximately 97.4% VOC destruction efficiency and the particulate emissions are 0.00635 GR/DSCF. The press system pollution control equipment is achieving approximately 97% VOC destruction efficiency and particulate emissions of 0.015 GR/DSCF. These values are within the First Amendment to the Consent Decree limits of 95% VOC destruction efficiency and 0.015 GR/DSCF.