

Note: This material is related to a section in *AP42, 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/

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APPENDIX A

EMISSION FACTOR CALCULATION SPREADSHEETS

This appendix presents printouts of the detailed spreadsheets that were constructed in order to calculate emission factors for WB/OSB rotary dryers and presses. Table A-1 presents the calculations for WB/OSB rotary dryer filterable PM, filterable PM-10, and condensible PM emission factors. Table A-2 presents the calculations for WB/OSB rotary dryer VOC emission factors. Table A-3 presents the calculations for WB/OSB rotary dryer CO, CO₂, NO_x, SO₂, and chromium emission factors. Table A-4 presents the calculations for WB/OSB rotary dryer speciated organic pollutant emission factors. Table A-5 presents the calculations for WB/OSB press filterable PM, filterable PM-10, condensible PM, NO_x, CO, CO₂, SO₂, VOC, and speciated organic pollutant emission factors.

As discussed in Section 4.3.1.1 of this report, the data available for many of the specific emission factors developed included the results of multiple tests on the same emission source. In such cases, the test-specific emission factors for the same source were averaged first, and that average emission factor then was averaged with the factors for the other sources to yield the candidate emission factors for AP-42. In Tables A-1 through A-4, the emission factor column is divided into two subcolumns, "Test," and "Dryer." The emission factor column labelled "Test" includes the available test-specific emission factors. The emission factor column labelled "Dryer" includes averages of test-specific emission factors for the same dryer. For dryers where only one test-specific emission factor was available, that emission factor appears in both the "Test" and "Dryer" columns. The AP-42 candidate emission factors were developed by averaging the dryer average emission factors in the "Dryer" column. A parallel structure applies to Table A-5 for OSB presses. Data in the shaded rows were not used to develop AP-42 emission factors.

TABLE A-1. SUMMARY OF WB/OSB DRYER EMISSION FACTOR CALCULATIONS--FILTERABLE PM, FILTERABLE PM-10, AND CONDENSIBLE PM

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
23,24	DSA-1	CPM	DFIRE	WREF	PINE SF	100	NA	NA	CYC	M202	3	2.21E+00	2.21E+00	A	
23,24	DSA-2	CPM	DFIRE	WREF	PINE SF	100	NA	NA	CYC	M202	3	1.30E+00	1.30E+00	A	
23,24	DSA-3	CPM	DFIRE	WREF	PINE SF	100	NA	NA	CYC	M202	3	2.04E+00	2.04E+00	A	
Uncontrolled CPM, direct wood-fired, pines												Average	1.85E+00		
												Minimum	1.30E+00		
												Maximum	2.21E+00		
59	DNB-1	CPM	DFIRE	WREF	HWOOI	100	NA	NA	CYC	M202	3	1.88E+00	1.88E+00	A	
Uncontrolled CPM, direct wood-fired, hardwood												Average	1.88E+00		
041-063092	XD041	CPM	DFIRE	WREF	SY PINI	70	HWOOI	30	CYC	OD7	3	9.10E-01		A	mixed species
041-121792	XD041	CPM	DFIRE	WREF	SY PINI	70	HWOOI	30	CYC	M5A	3	4.10E-01		A	mixed species
044-102588	XD044	CPM	DFIRE	SDUST	SPRUCH	50	UFIR	50	CYC	M5	3	4.42E+00		A	mixed species
215-062591	XD215	CPM	DFIRE	WREF	SY PINI	40	HWOOI	60	CYC	M202	3	1.07E+00		A	mixed species
215-062591	YD215	CPM	DFIRE	WREF	SY PINI	40	HWOOI	60	CYC	OD7	1	1.52E+00		D	1-run data
215-062591	YD215	CPM	DFIRE	WREF	SY PINI	40	HWOOI	60	CYC	OD7	1	7.10E-01		D	1-run data
30	DCH-1	CPM	DFIRE	WREF	NS	NS	NS	NS	CYC	M202	3	6.19E-02		B	unkn. species
32	DH1-1	CPM	DFIRE	WREF	NS	NS	NS	NS	CYC	WDNR	3	1.33E+00		B	unkn. species
32	DH1-2	CPM	DFIRE	WREF	NS	NS	NS	NS	CYC	WDNR	3	1.63E+00		B	unkn. species
42	DUR-1	CPM	DFIRE	WREF	NS	NS	NS	NS	CYC	M5	3	2.73E-01		B	unkn. species
42	DUR-2	CPM	DFIRE	WREF	NS	NS	NS	NS	CYC	M5	3	3.61E-01		C	unkn. species
43	DNW-1	CPM	DFIRE	WREF	NS	NS	NS	NS	CYC	M5	3	6.80E-02		B	unkn. species
44	DCO-1	CPM	DFIRE	WREF	NS	NS	NS	NS	CYC	M5	3	5.46E-01		B	unkn. species
44	DCO-2	CPM	DFIRE	WREF	NS	NS	NS	NS	CYC	M5	3	1.16E+00		B	unkn. species
44	DCO-3	CPM	DFIRE	WREF	NS	NS	NS	NS	CYC	M5	3	3.04E+00		B	unkn. species
4	DCO-1	CPM	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	7.00E-01		A	
4	DCO-1	CPM	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	3.30E-01	5.15E-01	A	
4	DCO-2	CPM	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	2	1.40E+00		B	
4	DCO-2	CPM	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	6.20E-01	1.01E+00	B	
4	DCO-3	CPM	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	5.40E-01		A	
4	DCO-3	CPM	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	2.60E-01	4.00E-01	A	
5	DNW-1	CPM	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	1.00E+00		A	
5	DNW-1	CPM	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	6.70E-01	8.35E-01	A	
5	DNW-2	CPM	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	3.30E-01		A	
5	DNW-2	CPM	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	8.60E-01	5.95E-01	A	
1	DSL-1	CPM	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M202	3	1.20E-01		C	
3	DSL-1	CPM	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M202	3	1.20E-01	1.20E-01	B	
1	DSL-2	CPM	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M202	3	5.20E-02		C	

TABLE A-2. SUMMARY OF WB/OSB DRYER EMISSION FACTOR CALCULATIONS--VOC(a)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
3	DSL-3	VOC	DFIRE	WREF	SY PINJ	100	NA	NA	MCLO	M25A	3	7.32E+00		C	Discarded
3	DSL-1	VOC	DFIRE	WREF	SY PINJ	100	NA	NA	MCLO	M25A	3	7.39E+00	7.39E+00	B	+FOR(0.0667
3	DSL-2	VOC	DFIRE	WREF	SY PINJ	100	NA	NA	MCLO	M25A	3	6.41E+00	6.41E+00	B	+FOR(0.0667
3	DSL-4	VOC	DFIRE	WREF	SY PINJ	100	NA	NA	MCLO	M25A	3	5.56E+00	5.56E+00	B	+FOR(0.0667
3	DSL-5	VOC	DFIRE	WREF	SY PINJ	100	NA	NA	MCLO	M25A	3	6.29E+00	6.29E+00	B	+FOR(0.0667
23,24	DSA-1	VOC	DFIRE	WREF	PINE SI	100	NA	NA	CYC	M25A	3	1.07E+01	1.07E+01	A	+FOR(0.0667
23,24	DSA-2	VOC	DFIRE	WREF	PINE SI	100	NA	NA	CYC	M25A	3	1.30E+01	1.30E+01	A	+FOR(0.0667
23,24	DSA-3	VOC	DFIRE	WREF	PINE SI	100	NA	NA	CYC	M25A	3	1.86E+01	1.86E+01	A	+FOR(0.0667
4	DCO-1	VOC	DFIRE	WREF	US PINJ	100	NA	NA	MCLO	M25A	3	1.02E+01	1.02E+01	A	+FOR(0.0667
4	DCO-2	VOC	DFIRE	WREF	US PINJ	100	NA	NA	MCLO	M25A	3	8.97E+00	8.97E+00	B	+FOR(0.0667
4	DCO-3	VOC	DFIRE	WREF	US PINJ	100	NA	NA	MCLO	M25A	3	6.90E+00	6.90E+00	A	+FOR(0.0667
5	DNW-1	VOC	DFIRE	WREF	US PINJ	100	NA	NA	MCLO	M25A	3	1.02E+01	1.02E+01	A	+FOR(0.0667
5	DNW-2	VOC	DFIRE	WREF	US PINJ	100	NA	NA	MCLO	M25A	3	6.90E+00	6.90E+00	A	+FOR(0.0667
7	DUR-2	VOC	DFIRE	WREF	US PINJ	100	NA	NA	MCLO	M25A	3	7.87E+00	7.87E+00	B	+FOR(0.0667
75	DRX-1	VOC	DFIRE	WREF	PINE SI	100	NA	NA	MCLO	M25A	3	9.41E+00	9.41E+00	A	+FOR(0.0667
75	DRX-2	VOC	DFIRE	WREF	PINE SI	100	NA	NA	MCLO	M25A	3	5.53E+00	5.53E+00	A	+FOR(0.0667
75	DRX-3	VOC	DFIRE	WREF	PINE SI	100	NA	NA	MCLO	M25A	3	4.29E+00	4.29E+00	A	+FOR(0.0667
75	DRX-4	VOC	DFIRE	WREF	PINE SI	100	NA	NA	MCLO	M25A	3	7.74E+00	7.74E+00	A	+FOR(0.0667
75	DRX-5	VOC	DFIRE	WREF	PINE SI	100	NA	NA	MCLO	M25A	3	8.85E+00	8.85E+00	A	+FOR(0.0667
088-120892	1D088	VOC	DFIRE	WREF	PINE SI	100	NA	NA	EFB	M25A	3	4.19E+00	4.19E+00	A	+FOR(0.0667
Uncontrolled VOC as propane, direct wood-fired, pines												Average	8.59E+00		
												Minimum	4.19E+00		
												Maximum	1.86E+01		
												Std. Dev.	3.36E+00		
7	DUR-1	VOC	DFIRE	WREF	US PINJ	100	NA	NA	MCLO	M25A	3	8.30E+00		C	Discarded
73	DTO-1	VOC	DFIRE	WREF	HWOOI	90	SWOOI	10	MCLO	M25A	3	9.06E-01		C	Discarded
73	DTO-2	VOC	DFIRE	WREF	HWOOI	90	SWOOI	10	MCLO	M25A	3	2.07E-01		C	Discarded
070-031992	2D070	VOC	DFIRE	NS	PINE SI	85	HWOOI	15	MCLO	M25	3	1.11E+01		A	mixed species
070-042392	1D070	VOC	DFIRE	NS	PINE SI	85	HWOOI	15	MCLO	M25	3	5.65E+00		A	mixed species
070-042492	3D070	VOC	DFIRE	NS	PINE SI	85	HWOOI	15	MCLO	M25	3	1.03E+01		A	mixed species
070-062891	1D070	VOC	DFIRE	NS	PINE SI	85	HWOOI	15	MCLO	M25	2	9.15E+00		B	mixed species
070-062891	3D070	VOC	DFIRE	NS	PINE SI	85	HWOOI	15	MCLO	M25	3	1.09E+01		A	mixed species
070-101091	2D070	VOC	DFIRE	NS	PINE SI	85	HWOOI	15	MCLO	M25A	3	8.49E+00		A	mixed species
070-101091	2D070	VOC	DFIRE	NS	PINE SI	85	HWOOI	15	MCLO	M25	3	1.03E+01		A	mixed species

TABLE A-3. SUMMARY OF WB/OSB DRYER EMISSION FACTOR CALCULATIONS--CO, CO2, NOX, SO2, AND CHROMIUM(a)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
088-12089	1D088	CO	DFIRE	WREF	PINE SF	100	NA	NA	EFB	M10	3	2.70E+00	2.70E+00	A	
096-06059	1D096	CO	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M10	3	5.99E-01		A	
096-06059	1D096	CO	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M10	3	1.62E+00		A	
096-06079	1D096	CO	DFIRE	DFINE	PINE SF	100	NA	NA	EFB	M10	3	4.46E-01		A	
096-06089	1D096	CO	DFIRE	DFINE	PINE SF	100	NA	NA	EFB	M10	3	6.20E-01	8.22E-01	A	
127-08219	1D127	CO	DFIRE	WDUS	ASPEN	95	PINE SF	5	EFB	M10	3	1.34E+00		A	
127-10229	1D127	CO	DFIRE	WDUS	ASPEN	96	PINE SF	4	EFB	M10	3	2.71E+00	2.03E+00	A	
210-01309	1D210	CO	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M10	3	2.09E+00		A	
210-02119	1D210	CO	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M10	3	8.99E+00		A	
210-02248	1D210	CO	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M10	3	6.92E+00		A	
210-04229	1D210	CO	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M10	3	5.65E+00		A	
210-04229	1D210	CO	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M10	3	2.11E+00	5.15E+00	A	
211-01299	1D211	CO	DFIRE	WREF	HWOOI	100	NA	NA	EFB	M10	3	5.23E+00	5.23E+00	A	
225-02079	1D225	CO	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M10	3	4.30E+00		A	
225-04199	1D225	CO	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M10	3	2.42E+00	3.36E+00	A	
096-01279	2D096	CO	DFIRE	DFINE	ASPEN	80	PINE SF	20	WESP	M10	3	7.40E+00	7.40E+00	A	
127-09128	2D127	CO	DFIRE	WDUS	ASPEN	100	NA	NA	EFB	M10	3	8.93E+00	8.93E+00	A	
211-01309	2D211	CO	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M10	3	8.57E+00	8.57E+00	A	
211-01289	3D211	CO	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M10	3	3.73E+00	3.73E+00	A	
44	DCO-1	CO	DFIRE	WREF	NS	NS	NS	NS	CYC	M10	3	3.65E+00		B	
4	DCO-1	CO	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M10	9	3.90E+00	3.78E+00	A	
44	DCO-2	CO	DFIRE	WREF	NS	NS	NS	NS	CYC	M10	3	1.29E+00		B	
4	DCO-2	CO	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M10	5	4.60E+00	2.95E+00	B	
44	DCO-3	CO	DFIRE	WREF	NS	NS	NS	NS	CYC	M10	3	3.20E+00		B	
4	DCO-3	CO	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M10	9	6.90E+00	5.05E+00	A	
95	DDG-1	CO	DFIRE	WREF	HWOOI	99	SWOOI	1	MCLO/EFB	M10	3	2.01E+00		A	
97	DDG-1	CO	DFIRE	WREF	HWOOI	99	SWOOI	1	MCLO/EFB	M10	3	2.12E+00		A	
98,99	DDG-1	CO	DFIRE	WREF	NS	NS	NS	NS	MCLO/EFB	M10	3	3.32E+00	2.48E+00	A	
10	DEL-1	CO	DFIRE	WREF	US PINI	60	HWOOI	40	MCLO/EFB	M10	3	1.10E+01	1.10E+01	B	
29	DH1-1	CO	DFIRE	WREF	NS	NS	NS	NS	CYC	M10	3	6.74E+00		B	
32	DH1-1	CO	DFIRE	WREF	NS	NS	NS	NS	CYC	M10	3	4.20E+00	5.47E+00	B	
29	DH1-2	CO	DFIRE	WREF	NS	NS	NS	NS	CYC	M10	3	9.02E+00		B	
32	DH1-2	CO	DFIRE	WREF	NS	NS	NS	NS	CYC	M10	3	4.25E+00	6.64E+00	B	
38	DH2-1	CO	DFIRE	WREF	NS	NS	NS	NS	CYC	M10	3	9.90E+00		B	

TABLE A-4. SUMMARY OF WB/OSB DRYER EMISSION FACTOR CALCULATIONS--SPECIATED ORGANIC COMPOUNDS(a)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
32	DH1-12	1METHNAPTH	DFIRE	WREF	NS	NS	NS	NS	EFB/RTO	MM5	3	1.21E-05		B	unkn. species
32	DH2-12	1METHNAPTH	DFIRE	WREF	NS	NS	NS	NS	MCLO/EFB/RT	MM5	3	2.27E-06		B	unkn. species
32	DH1-12	ACENAPTH	DFIRE	WREF	NS	NS	NS	NS	EFB/RTO	MM5	3	1.15E-05		B	unkn. species
32	DH2-12	ACENAPTH	DFIRE	WREF	NS	NS	NS	NS	MCLO/EFB/RT	MM5	3	2.56E-06		B	unkn. species
215-062591	XD215	ACETALD	DFIRE	WREF	SY PINI	40	HWOOD	60	WESP	M0011	3	1.34E-01		A	mixed species
215-062591	XD215	ACETALD	DFIRE	WREF	SY PINI	40	HWOOD	60	WESP	M0011	3	9.00E-02		A	mixed species
215-062591	XD215	ACETONE	DFIRE	WREF	SY PINI	40	HWOOD	60	WESP	M0011	3	4.63E-02		A	mixed species
215-062591	XD215	ACETONE	DFIRE	WREF	SY PINI	40	HWOOD	60	WESP	M0011	3	3.13E-02		A	mixed species
215-062591	XD215	ACROLEIN	DFIRE	WREF	SY PINI	40	HWOOD	60	WESP	M0011	3	3.43E-02		A	mixed species
215-062591	XD215	ACROLEIN	DFIRE	WREF	SY PINI	40	HWOOD	60	WESP	M0011	3	3.17E-02		A	mixed species
29	DH1-12	BENZENE	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	M18	3	2.93E-03		B	unkn. species
32	DH1-12	BENZENE	DFIRE	WREF	NS	NS	NS	NS	EFB/RTO	M18	3	1.97E-03		B	unkn. species
32	DH2-12	BENZENE	DFIRE	WREF	NS	NS	NS	NS	MCLO/EFB/RT	M18	3	6.43E-04		B	unkn. species
73	DTO-12	BENZENE	DFIRE	WREF	HWOOI	90	SWOOD	10	MCLO/WESP	M18	3	1.58E-03	1.58E-03	A	
Uncontrolled benzene, direct wood-fired, hardwood												Average	1.58E-03		
29	DH1-12	BENZOAP	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	MM5	3	1.13E-06		B	unkn. species
32	DH1-12	BENZOAP	DFIRE	WREF	NS	NS	NS	NS	EFB/RTO	MM5	3	7.08E-06		B	unkn. species
32	DH2-12	BENZOAP	DFIRE	WREF	NS	NS	NS	NS	MCLO/EFB/RT	MM5	3	3.44E-06		B	unkn. species
38	DH2-12	BENZOAP	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	MM5	3	1.97E-06		B	unkn. species
73	DTO-12	BENZOAP	DFIRE	WREF	HWOOI	90	SWOOD	10	MCLO/WESP	MM5	3	3.00E-06	3.00E-06	C	
Uncontrolled benzo-a-pyrene, direct wood-fired, hardwood												Average	3.00E-06		
215-062591	XD215	BUTYLALDEH	DFIRE	WREF	SY PINI	40	HWOOD	60	WESP	M0011	3	2.70E-02		A	mixed species
215-062591	XD215	BUTYLALDEH	DFIRE	WREF	SY PINI	40	HWOOD	60	WESP	M0011	3	7.83E-03		A	mixed species
215-062591	XD215	CROTONALDE	DFIRE	WREF	SY PINI	40	HWOOD	60	WESP	M0011	3	1.01E-02		A	mixed species
215-062591	XD215	CROTONALDE	DFIRE	WREF	SY PINI	40	HWOOD	60	WESP	M0011	3	1.13E-02		A	mixed species
23,24	DSA-1	FOR	DFIRE	WREF	PINE SF	100	NA	NA	CYC	M0011	3	1.30E-01	1.30E-01	A	
23,24	DSA-2	FOR	DFIRE	WREF	PINE SF	100	NA	NA	CYC	M0011	3	1.41E-01	1.41E-01	A	
23,24	DSA-3	FOR	DFIRE	WREF	PINE SF	100	NA	NA	CYC	M0011	3	1.20E-01	1.20E-01	A	
2	DSL-1	FOR	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M0011	3	1.70E-02	1.70E-02	B	
2	DSL-2	FOR	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M0011	3	3.10E-02	3.10E-02	C	
2	DSL-3	FOR	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M0011	3	5.40E-02	5.40E-02	C	
2	DSL-4	FOR	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M0011	3	6.10E-02	6.10E-02	C	
2	DSL-5	FOR	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M0011	3	4.50E-02	4.50E-02	C	
4	DCO-1	FOR	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M0011	3	4.60E-02	4.60E-02	A	
4	DCO-2	FOR	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M0011	3	4.70E-02	4.70E-02	B	

TABLE A-5. SUMMARY OF EMISSION FACTOR CALCULATIONS FOR WB/OSB PRESSES(a)

Test Code	Unit code	Pollutant(b)	Wood species(c)				Resin type(d)	Control device(e)	Test method(f)	No. of runs	Emission factor, Lb/MSF 3/8		Data Rating	Comment
			Primary	%	Second.	%					Test	Press		
044-062392.1P044	CO		SPRUCF	50	UFIR	50	PF	NONE	M10	2	1.29E-01	1.29E-01	B	
088-121092.1P088	CO		HWOOI	95	PINE SP	5	PF/MDI	NONE	M10	3	8.60E-02	8.60E-02	A	
096-060490.1P096	CO		ASPEN	100	NA	NA	PF/MDI	NONE	M10	3	1.13E-01		A	
096-060490.1P096	CO		ASPEN	100	NA	NA	PF/MDI	NONE	M10	3	1.36E-01		A	
096-060590.1P096	CO		ASPEN	100	NA	NA	PF/MDI	NONE	M10	3	5.27E-02		A	
096-060590.1P096	CO		ASPEN	100	NA	NA	PF/MDI	NONE	M10	3	4.67E-02		A	
096-060690.1P096	CO		ASPEN	60	PINE SP	40	PF/MDI	NONE	M10	3	3.58E-02		A	
096-060690.1P096	CO		ASPEN	60	PINE SP	40	PF/MDI	NONE	M10	3	6.61E-02		A	
096-060790.1P096	CO		PINE SF	100	NA	NA	PF/MDI	NONE	M10	3	6.59E-02		A	
096-060790.1P096	CO		PINE SF	100	NA	NA	PF/MDI	NONE	M10	3	5.72E-02		A	
096-060890.1P096	CO		PINE SF	100	NA	NA	PF/MDI	NONE	M10	3	6.11E-02		A	
096-060890.1P096	CO		PINE SF	100	NA	NA	PF/MDI	NONE	M10	3	3.99E-02	6.74E-02	A	
210-021292.1P210	CO		ASPEN	100	NA	NA	MDI	NONE	M10	3	2.03E-01	2.03E-01	A	
211-022592.1P211	CO		HWOOI	100	NA	NA	PF/MDI	NONE	M10	3	8.37E-02	8.37E-02	A	
49,50	PDG-1	CO	POPLAI	90	PINE SP	10	PF/MDI	NONE	M10	3	2.12E-01	2.12E-01	A	
29	PH1-1	CO	NS	NS	NS	NS	PF/MDI	NONE	M10	3	6.17E-02	6.17E-02	A	
38	PH2-1	CO	NS	NS	NS	NS	PF/MDI	NONE	M10	3	1.12E-01	1.12E-01	A	
52	PHO-1	CO	POPLAI	90	HWOOI	10	PF/MDI	NONE	M10	3	1.31E-01	1.31E-01	A	
59	PNB-1	CO	HWOOI	100	NA	NA	MDI	NONE	M10	3	5.93E-02	5.93E-02	A	
23,24	PSA-1	CO	PINE SF	100	NA	NA	PF/MDI	NONE	M10	3	3.10E-02		A	
36	PSA-1	CO	NS	NS	NS	NS	PF/MDI	NONE	M10	3	6.30E-02	4.70E-02	A	
47	PSL-1	CO	SY PINI	100	NA	NA	PF/MDI	NONE	M10	3	4.80E-02	4.80E-02	B	
39	PTH-1	CO	HWOOI	100	NA	NA	MDI	NONE	M10	3	6.60E-02	6.60E-02	A	
60	PTO-1	CO	HWOOI	90	SWOOD	10	PF/MDI	NONE	M10	3	2.70E-01		A	
71	PTO-1	CO	NS	NS	NS	NS	PF/MDI	NONE	M10	3	1.11E-01		A	
73	PTO-1	CO	HWOOI	90	SWOOD	10	PF/MDI	NONE	M10	3	5.14E-02	1.44E-01	A	
Uncontrolled CO											Average	1.04E-01		
											Minimum	3.10E-02		
											Maximum	2.70E-01		
											Std. Dev.	5.94E-02		
29	PH1-1	CO	NS	NS	NS	NS	PF/MDI	RTO	M10	3	2.12E-01		A	
56	PH1-1	CO	NS	NS	NS	NS	PF/MDI	RTO	M10	3	1.12E-01	1.62E-01	B	
38	PH2-1	CO	NS	NS	NS	NS	PF/MDI	RTO	M10	3	2.08E-01		A	
56	PH2-1	CO	NS	NS	NS	NS	PF/MDI	RTO	M10	3	1.63E-01	1.86E-01	B	
52	PHO-1	CO	POPLAI	90	HWOOI	10	PF/MDI	RTO	M10	3	2.15E-01	2.15E-01	A	
75	PRX-1	CO	PINE SF	100	NA	NA	PF/MDI	RTO	M10	3	5.13E-02	5.13E-02	A	

TABLE A-5. (Continued)

Test Code	Unit code	Pollutant(b)	Wood species(c)				Resin type(d)	Control device(e)	Test method(f)	No. of runs	Emission factor, Lb/MSF 3/8		Data Rating	Comment
			Primary	%	Second.	%					Test	Press		
23,24	PSA-1 CO		PINE SF	100	NA	NA	PF/MDI	RTO	M10	3	1.57E-01		A	
36	PSA-1 CO		NS	NS	NS	NS	PF/MDI	RTO	M10	3	1.03E-01	1.30E-01	A	
47	PSL-1 CO		SY PINE	100	NA	NA	PF/MDI	RTO	M10	3	8.41E-01	8.41E-01	B	
RTO-controlled CO											Average	2.64E-01		
											Minimum	5.13E-02		
											Maximum	8.41E-01		
											Std. Dev.	2.36E-01		
30	PCH-1 CO2		NS	NS	NS	NS	MDI	NONE	M3	3	6.88E+00	6.88E+00	A	
94	PDC-1 CO2		NS	NS	NS	NS	PF/MDI	NONE	M3	3	3.68E+00		A	
94	PDC-1 CO2		NS	NS	NS	NS	PF/MDI	NONE	M3	3	3.92E+00	3.80E+00	A	
49,50	PDG-1 CO2		POPLAI	90	PINE SP	10	PF/MDI	NONE	M3	3	1.48E+02		A	
49,50	PDG-1 CO2		POPLAI	90	PINE SP	10	PF/MDI	NONE	M3	3	1.33E+02		A	
95	PDG-1 CO2		HWOOI	99	SWOOD	1	PF/MDI	NONE	M3	3	9.84E+00		A	
96	PDG-1 CO2		HWOOI	95	SWOOD	5	PF/MDI	NONE	M3A	3	1.34E+01		A	
97	PDG-1 CO2		HWOOI	99	SWOOD	1	PF/MDI	NONE	M3	3	9.61E+00		A	
98,99	PDG-1 CO2		NS	NS	NS	NS	PF/MDI	NONE	M3	3	9.54E+00		A	
105	PDG-1 CO2		NS	NS	NS	NS	PF/MDI	NONE	M3A	3	4.23E+00	4.68E+01	A	
56	PH2-1 CO2		NS	NS	NS	NS	PF/MDI	NONE	M3	3	5.41E+00	5.41E+00	B	
40,41	PHO-1 CO2		NS	NS	NS	NS	PF/MDI	NONE	M3	3	1.31E+01	1.31E+01	A	
57	PMO-1 CO2		HWOOI	80	SWOOD	20	PF/MDI	NONE	M3	3	8.47E+00		A	
57	PMO-1 CO2		HWOOI	80	SWOOD	20	PF/MDI	NONE	M3	3	8.24E+00		A	
57	PMO-1 CO2		HWOOI	80	SWOOD	20	PF/MDI	NONE	M3	3	8.42E+00		A	
70	PMO-1 CO2		HWOOI	80	SWOOD	20	PF/MDI	NONE	M3A	3	7.72E+00		A	
70	PMO-1 CO2		HWOOI	80	SWOOD	20	PF/MDI	NONE	M3A	3	7.79E+00		A	
70	PMO-1 CO2		HWOOI	80	SWOOD	20	PF/MDI	NONE	M3A	3	8.12E+00	8.13E+00	A	
59	PNB-1 CO2		HWOOI	100	NA	NA	MDI	NONE	M3A	3	6.83E+00		A	
59	PNB-1 CO2		HWOOI	100	NA	NA	MDI	NONE	M3A	3	4.75E+00		A	
59	PNB-1 CO2		HWOOI	100	NA	NA	MDI	NONE	M3A	3	7.11E+00	6.23E+00	A	
23,24	PSA-1 CO2		PINE SF	100	NA	NA	PF/MDI	NONE	M3A	3	3.32E+00		A	
36	PSA-1 CO2		NS	NS	NS	NS	PF/MDI	NONE	M3A	3	2.29E+00		A	
36	PSA-1 CO2		NS	NS	NS	NS	PF/MDI	NONE	M3A	3	2.60E+00		A	
36	PSA-1 CO2		NS	NS	NS	NS	PF/MDI	NONE	M3A	3	2.27E+00		A	
36	PSA-1 CO2		NS	NS	NS	NS	PF/MDI	NONE	M3A	3	2.55E+00		A	
76,77	PSA-1 CO2		NS	NS	NS	NS	PF/MDI	NONE	M3	3	4.99E+00		A	
76,77	PSA-1 CO2		NS	NS	NS	NS	PF/MDI	NONE	M3	3	4.99E+00		A	
76,77	PSA-1 CO2		NS	NS	NS	NS	PF/MDI	NONE	M3	3	5.01E+00		A	

TABLE A-5. (Continued)

Test Code	Unit code	Pollutant(b)	Wood species(c)				Resin type(d)	Control device(e)	Test method(f)	No. of runs	Emission factor, Lb/MSF 3/8		Data Rating	Comment
			Primary	%	Second.	%					Test	Press		
76,77	PSA-1	CO2	NS	NS	NS	NS	PF/MDI	NONE	M3	3	5.08E+00	3.68E+00	A	
39	PTH-1	CO2	HWOOI	100	NA	NA	MDI	NONE	M3A	3	4.22E+00	4.22E+00	A	
60	PTO-1	CO2	HWOOI	90	SWOOD	10	PF/MDI	NONE	M3A	3	1.06E+01		A	
71	PTO-1	CO2	NS	NS	NS	NS	PF/MDI	NONE	M3	3	4.36E+01		A	
73	PTO-1	CO2	HWOOI	90	SWOOD	10	PF/MDI	NONE	M3	3	9.44E+00		A	
73	PTO-1	CO2	HWOOI	90	SWOOD	10	PF/MDI	NONE	M3	3	9.61E+00		A	
73	PTO-1	CO2	HWOOI	90	SWOOD	10	PF/MDI	NONE	M3	3	9.53E+00	1.66E+01	A	
Uncontrolled CO2											Average	1.15E+01		
											Minimum	2.27E+00		
											Maximum	1.48E+02		
											Std. Dev.	3.16E+01		
29	PH1-1	CO2	NS	NS	NS	NS	PF/MDI	RTO	M3A	3	4.22E+00		A	
29	PH1-1	CO2	NS	NS	NS	NS	PF/MDI	RTO	M3A	3	5.64E+01		A	
29	PH1-1	CO2	NS	NS	NS	NS	PF/MDI	RTO	M3A	3	6.79E+01		A	
56	PH1-1	CO2	NS	NS	NS	NS	PF/MDI	RTO	M3	3	5.24E+01		B	
56	PH1-1	CO2	NS	NS	NS	NS	PF/MDI	RTO	M3	3	5.84E+01		B	
56	PH1-1	CO2	NS	NS	NS	NS	PF/MDI	RTO	M3	3	5.92E+01	4.98E+01	B	
38	PH2-1	CO2	NS	NS	NS	NS	PF/MDI	RTO	M3A	3	4.67E+00		A	
38	PH2-1	CO2	NS	NS	NS	NS	PF/MDI	RTO	M3A	3	4.75E+00		A	
56	PH2-1	CO2	NS	NS	NS	NS	PF/MDI	RTO	M3	3	6.87E+01		B	
56	PH2-1	CO2	NS	NS	NS	NS	PF/MDI	RTO	M3	3	6.71E+01		B	
56	PH2-1	CO2	NS	NS	NS	NS	PF/MDI	RTO	M3	3	5.09E+00	3.01E+01	B	
75	PRX-1	CO2	PINE SF	100	NA	NA	PF/MDI	RTO	M3A	3	6.46E+01	6.46E+01	A	
23,24	PSA-1	CO2	PINE SF	100	NA	NA	PF/MDI	RTO	M3A	3	3.10E+00		A	
23,24	PSA-1	CO2	PINE SF	100	NA	NA	PF/MDI	RTO	M3A	3	3.61E+00		A	
36	PSA-1	CO2	NS	NS	NS	NS	PF/MDI	RTO	M3A	3	3.46E+01		A	
36	PSA-1	CO2	NS	NS	NS	NS	PF/MDI	RTO	M3A	3	3.60E+01		A	
36	PSA-1	CO2	NS	NS	NS	NS	PF/MDI	RTO	M3A	3	2.14E+01		A	
36	PSA-1	CO2	NS	NS	NS	NS	PF/MDI	RTO	M3A	3	3.82E+01	2.28E+01	A	
RTO-controlled CO2											Average	4.18E+01		
											Minimum	3.10E+00		
											Maximum	6.87E+01		
											Std. Dev.	2.64E+01		
40,41	PHO-1	CO2	NS	NS	NS	NS	PF/MDI	RTO	M3	1	1.29E+01		NR	

TABLE A-5. (Continued)

Test Code	Unit code	Pollutant(b)	Wood species(c)				Resin type(d)	Control device(e)	Test method(f)	No. of runs	Emission factor, Lb/MSF 3/8		Data Rating	Comment
			Primary	%	Second.	%					Test	Press		
210-021292	1P210	CPM	ASPEN	100	NA	NA	MDI	NONE	M202	3	2.42E-02	2.42E-02	A	
30	PCH-1	CPM	NS	NS	NS	NS	MDI	NONE	M202	3	1.22E-01	1.22E-01	A	
39	PTH-1	CPM	HWOOI	100	NA	NA	MDI	NONE	M202	3	1.01E-02	1.01E-02	A	
59	PNB-1	CPM	HWOOI	100	NA	NA	MDI	NONE	M202	3	2.62E-02	2.62E-02	A	
Uncontrolled CPM, MDI resin											Average	4.56E-02		
											Minimum	1.01E-02		
											Maximum	1.22E-01		
044-062392	1P044	CPM	SPRUCI	50	UFIR	50	PF	NONE	OD7	2	3.21E-01		B	
044-062392	1P044	CPM	SPRUCI	50	UFIR	50	PF	NONE	OD7	2	2.39E-01		B	
044-092393	1P044	CPM	SPRUCI	50	UFIR	50	PF	NONE	OD7	3	1.83E-01	2.48E-01	A	
Uncontrolled CPM, PF resin											Average	2.48E-01		
											Minimum	1.83E-01		
											Maximum	3.21E-01		
088-121092	1P088	CPM	HWOOI	95	PINE SP	5	PF/MDI	NONE	M202	3	2.32E-01	2.32E-01	A	
096-060490	1P096	CPM	ASPEN	100	NA	NA	PF/MDI	NONE	M202	3	1.03E-01		A	
096-060490	1P096	CPM	ASPEN	100	NA	NA	PF/MDI	NONE	M202	3	1.40E-01		A	
096-060590	1P096	CPM	ASPEN	100	NA	NA	PF/MDI	NONE	M202	3	8.97E-02		A	
096-060590	1P096	CPM	ASPEN	100	NA	NA	PF/MDI	NONE	M202	3	5.02E-02		A	
096-060690	1P096	CPM	ASPEN	60	PINE SP	40	PF/MDI	NONE	M202	3	1.41E-01		A	
096-060690	1P096	CPM	ASPEN	60	PINE SP	40	PF/MDI	NONE	M202	3	1.06E-01		A	
096-060790	1P096	CPM	PINE SP	100	NA	NA	PF/MDI	NONE	M202	3	4.58E-02		A	
096-060790	1P096	CPM	PINE SP	100	NA	NA	PF/MDI	NONE	M202	3	4.35E-02		A	
096-060890	1P096	CPM	PINE SP	100	NA	NA	PF/MDI	NONE	M202	3	5.77E-02		A	
096-060890	1P096	CPM	PINE SP	100	NA	NA	PF/MDI	NONE	M202	3	2.33E-01	1.01E-01	A	
211-022592	1P211	CPM	HWOOI	100	NA	NA	PF/MDI	NONE	M5	3	3.00E-03		A	
211-022692	1P211	CPM	HWOOI	100	NA	NA	PF/MDI	NONE	M5	3	1.45E-02	8.75E-03	A	
096-012893	2P096	CPM	NS	NS	NS	NS	PF/MDI	NONE	M202	3	5.18E-02	5.18E-02	A	
56	PH1-1	CPM	NS	NS	NS	NS	PF/MDI	NONE	WDNR	3	8.72E-02	8.72E-02	A	
56	PH2-1	CPM	NS	NS	NS	NS	PF/MDI	NONE	WDNR	3	1.38E-01	1.38E-01	A	
40,41	PHO-1	CPM	NS	NS	NS	NS	PF/MDI	NONE	M202	3	5.73E-02	5.73E-02	A	
54	PMO-1	CPM	HWOOI	90	SWOOD	10	PF/MDI	NONE	M202	3	1.15E-02		A	
57	PMO-1	CPM	HWOOI	80	SWOOD	20	PF/MDI	NONE	M202	3	5.17E-02		A	
70	PMO-1	CPM	HWOOI	80	SWOOD	20	PF/MDI	NONE	M202	3	1.03E-01	5.54E-02	A	
36	PSA-1	CPM	NS	NS	NS	NS	PF/MDI	NONE	M202	3	1.92E-01	1.92E-01	A	
47	PSL-1	CPM	SY PINE	100	NA	NA	PF/MDI	NONE	M5	3	1.47E-01	1.47E-01	B	
60	PTO-1	CPM	HWOOI	90	SWOOD	10	PF/MDI	NONE	M202	3	8.67E-01		A	

TABLE A-5. (Continued)

Test Code	Unit code	Pollutant(b)	Wood species(c)				Resin type(d)	Control device(e)	Test method(f)	No. of runs	Emission factor, Lb/MSF 3/8		Data Rating	Comment
			Primary	%	Second.	%					Test	Press		
71	PTO-1	CPM	NS	NS	NS	NS	PF/MDI	NONE	M202	3	9.75E-02		A	
73	PTO-1	CPM	HWOOI	90	SWOOD	10	PF/MDI	NONE	WDNR	3	1.09E-01	3.58E-01	A	
7	PUR-1	CPM	US PINE	100	NA	NA	PF/MDI	NONE	M202	3	2.20E-01	2.20E-01	A	
Uncontrolled CPM, PF/MDI resins											Average	1.37E-01		
											Minimum	3.00E-03		
											Maximum	8.67E-01		
											Std. Dev.	1.64E-01		
29	PH1-1	CPM	NS	NS	NS	NS	PF/MDI	RTO	WDNR	3	4.69E-02		A	
56	PH1-1	CPM	NS	NS	NS	NS	PF/MDI	RTO	WDNR	3	9.54E-02	7.12E-02	A	
38	PH2-1	CPM	NS	NS	NS	NS	PF/MDI	RTO	WDNR	3	1.52E-02		A	
56	PH2-1	CPM	NS	NS	NS	NS	PF/MDI	RTO	WDNR	3	8.82E-02	5.17E-02	A	
40,41	PHO-1	CPM	NS	NS	NS	NS	PF/MDI	RTO	M202	3	2.24E-02	2.24E-02	A	
75	PRX-1	CPM	PINE SF	100	NA	NA	PF/MDI	RTO	M202	3	1.95E-02	1.95E-02	A	
23,24	PSA-1	CPM	PINE SF	100	NA	NA	PF/MDI	RTO	M202	3	1.59E-01		A	
36	PSA-1	CPM	NS	NS	NS	NS	PF/MDI	RTO	M202	3	3.76E-01	2.68E-01	A	
47	PSL-1	CPM	SY PINE	100	NA	NA	PF/MDI	RTO	M5	3	6.21E-02	6.21E-02	B	
RTO-controlled CPM, PF/MDI resins											Average	8.24E-02		
											Minimum	1.52E-02		
											Maximum	3.76E-01		
											Std. Dev.	1.14E-01		
4	PCO-1	CPM	US PINE	100	NA	NA	NS	NONE	M202	3	4.00E-01		A	
4	PCO-1	CPM-I	US PINE	100	NA	NA	NS	NONE	M202	3	5.60E-02		A	
7	PUR-1	CPM-I	US PINE	100	NA	NA	PF/MDI	NONE	M202	3	6.80E-02		A	
4	PCO-1	CPM-O	US PINE	100	NA	NA	NS	NONE	M202	3	3.50E-01		A	
7	PUR-1	CPM-O	US PINE	100	NA	NA	PF/MDI	NONE	M202	3	1.50E-01		A	
210-021292	1P210	FOR	ASPEN	100	NA	NA	MDI	NONE	M0011	3	9.98E-02	9.98E-02	A	
59	PNB-1	FOR	HWOOI	100	NA	NA	MDI	NONE	M0011	3	2.78E-02	2.78E-02	A	
Uncontrolled formaldehyde, MDI resin											Average	6.38E-02		
											Minimum	2.78E-02		
											Maximum	9.98E-02		
225-041990	1P225	FOR	HWOOI	100	NA	NA	MDI	NONE	MN3500	3	1.50E-01		D	+ unloader
174-041191	1P174	FOR	PINE SF	60	HWOOI	40	NS	NONE		3	9.40E-02		D	
4	PCO-1	FOR	US PINE	100	NA	NA	NS	NONE	M0011	3	4.80E-02		A	

TABLE A-5. (Continued)

Test Code	Unit code	Pollutant(b)	Wood species(c)				Resin type(d)	Control device(e)	Test method(f)	No. of runs	Emission factor, Lb/MSF 3/8		Data Rating	Comment
			Primary	%	Second.	%					Test	Press		
044-062392	1P044	FOR	SPRUCI	50	UFIR	50	PF	NONE	P&CAM125	2	7.40E-03		B	
044-062392	1P044	FOR	SPRUCI	50	UFIR	50	PF	NONE	P&CAM125	2	1.02E-02		B	
044-062392	1P044	FOR	SPRUCI	50	UFIR	50	PF	NONE	TO-5	2	1.80E-03		B	
044-062392	1P044	FOR	SPRUCI	50	UFIR	50	PF	NONE	TO-5	2	3.05E-03	5.61E-03	B	
069-062492	1P069	FOR	POPLAI	100	NA	NA	PF	NONE	M0011	3	5.07E-02	5.07E-02	C	
070-012793	1P070	FOR	PINE SF	85	HWOOI	15	PF	NONE	M0011	3	7.30E-02	7.30E-02	A	
Uncontrolled formaldehyde, PF resin											Average	4.31E-02		
											Minimum	1.80E-03		
											Maximum	7.30E-02		
											Std. Dev.	3.00E-02		
088-121092	1P088	FOR	HWOOI	95	PINE SP	5	PF/MDI	NONE	M0011	3	4.07E-02	4.07E-02	A	
211-022592	1P211	FOR	HWOOI	100	NA	NA	PF/MDI	NONE	M0011	3	6.53E-02	6.53E-02	A	
096-012993	2P096	FOR	NS	NS	NS	NS	PF/MDI	NONE	M0011	3	4.77E-02	4.77E-02	A	
225-020692	2P225	FOR	HWOOI	100	NA	NA	PF/MDI	NONE	M0011	3	1.54E-01	1.54E-01	A	
94	PDC-1	FOR	NS	NS	NS	NS	PF/MDI	NONE	M0011	3	1.63E-02	1.63E-02	A	
49,50	PDG-1	FOR	POPLAI	90	PINE SP	10	PF/MDI	NONE	M0011	3	3.21E-02		A	
95	PDG-1	FOR	HWOOI	99	SWOOD	1	PF/MDI	NONE	M0011	3	6.04E-02		A	
97	PDG-1	FOR	HWOOI	99	SWOOD	1	PF/MDI	NONE	M0011	3	5.95E-02		A	
98,99	PDG-1	FOR	NS	NS	NS	NS	PF/MDI	NONE	M0011	3	7.53E-02	5.68E-02	A	
52	PHO-1	FOR	POPLAI	90	HWOOI	10	PF/MDI	NONE	ACET	3	9.54E-02	9.54E-02	A	
54	PMO-1	FOR	HWOOI	90	SWOOD	10	PF/MDI	NONE	M0011	3	6.57E-02		A	
57	PMO-1	FOR	HWOOI	80	SWOOD	20	PF/MDI	NONE	M0011	3	4.79E-02		A	
70	PMO-1	FOR	HWOOI	80	SWOOD	20	PF/MDI	NONE	M0011	3	3.73E-02	5.03E-02	A	
23,24	PSA-1	FOR	PINE SF	100	NA	NA	PF/MDI	NONE	M0011	3	4.75E-02		A	
36	PSA-1	FOR	NS	NS	NS	NS	PF/MDI	NONE	M0011	3	4.28E-02		A	
76,77	PSA-1	FOR	NS	NS	NS	NS	PF/MDI	NONE	M0011	3	5.71E-03	3.20E-02	A	
73	PTO-1	FOR	HWOOI	90	SWOOD	10	PF/MDI	NONE	M0011	3	2.30E-02	2.30E-02	A	
7	PUR-1	FOR	US PINE	100	NA	NA	PF/MDI	NONE	M0011	3	1.10E-01	1.10E-01	A	
Uncontrolled formaldehyde, PF/MDI resins											Average	6.29E-02		
											Minimum	5.71E-03		
											Maximum	1.54E-01		
											Std. Dev.	3.55E-02		
088-121588	2P088	FOR	HWOOI	95	SWOOD	5	PF/MDI	NONE	MN3500	3	1.91E-01		D	+ unloader
096-060490	1P096	FOR	ASPEN	100	NA	NA	PF/MDI	NONE	MN3500	3	1.77E-02		D	
096-060490	1P096	FOR	ASPEN	100	NA	NA	PF/MDI	NONE	MN3500	3	2.03E-02		D	
096-060590	1P096	FOR	ASPEN	100	NA	NA	PF/MDI	NONE	MN3500	3	1.57E-02		D	

TABLE A-5. (Continued)

Test Code	Unit code	Pollutant(b)	Wood species(c)				Resin type(d)	Control device(e)	Test method(f)	No. of runs	Emission factor, Lb/MSF 3/8		Data Rating	Comment
			Primary	%	Second.	%					Test	Press		
096-060590	1P096	FOR	ASPEN	100	NA	NA	PF/MDI	NONE	MN3500	3	1.47E-02		D	
096-060690	1P096	FOR	ASPEN	60	PINE SP	40	PF/MDI	NONE	MN3500	3	7.94E-03		D	
096-060690	1P096	FOR	ASPEN	60	PINE SP	40	PF/MDI	NONE	MN3500	3	7.57E-03		D	
096-060790	1P096	FOR	PINE SP	100	NA	NA	PF/MDI	NONE	MN3500	3	8.00E-03		D	
096-060790	1P096	FOR	PINE SP	100	NA	NA	PF/MDI	NONE	MN3500	3	9.53E-03		D	
096-060890	1P096	FOR	PINE SP	100	NA	NA	PF/MDI	NONE	MN3500	3	6.10E-03		D	
096-060890	1P096	FOR	PINE SP	100	NA	NA	PF/MDI	NONE	MN3500	3	5.17E-03		D	
29	PH1-1	FOR	NS	NS	NS	NS	PF/MDI	RTO	M0011	3	4.24E-03		A	
56	PH1-1	FOR	NS	NS	NS	NS	PF/MDI	RTO	M0011	3	1.88E-03	3.06E-03	A	
38	PH2-1	FOR	NS	NS	NS	NS	PF/MDI	RTO	M0011	3	3.32E-03		A	
56	PH2-1	FOR	NS	NS	NS	NS	PF/MDI	RTO	M0011	3	2.52E-03	2.92E-03	A	
52	PHO-1	FOR	POPLAI	90	HWOOI	10	PF/MDI	RTO	ACET	3	4.27E-03	4.27E-03	A	
23,24	PSA-1	FOR	PINE SP	100	NA	NA	PF/MDI	RTO	M0011	3	1.29E-03		A	
36	PSA-1	FOR	NS	NS	NS	NS	PF/MDI	RTO	M0011	3	1.41E-03	1.35E-03	A	
47	PSL-1	FOR	SY PINE	100	NA	NA	PF/MDI	RTO	M0011	5	9.69E-03	9.69E-03	B	
RTO-controlled formaldehyde, PF/MDI resins											Average	4.26E-03		
											Minimum	1.29E-03		
											Maximum	9.69E-03		
											Std. Dev.	2.73E-03		
096-092790	1P096	MDI	ASPEN	100	NA	NA	MDI	NONE	N347	3	1.87E-03		A	
096-092790	1P096	MDI	ASPEN	80	PINE SP	20	MDI	NONE	N347	3	8.03E-04	1.34E-03	A	
59	PNB-1	MDI	HWOOI	100	NA	NA	MDI	NONE	1,2-PP	3	2.10E-03	2.10E-03	A	
Uncontrolled MDI, MDI resin											Average	1.72E-03		
											Minimum	8.03E-04		
											Maximum	2.10E-03		
088-031193	1P088	MDI	HWOOI	95	SWOOD	5	PF/MDI	NONE	N347	3	3.97E-03		A	
088-031193	1P088	MDI	HWOOI	95	SWOOD	5	PF/MDI	NONE	N347	3	5.93E-03	4.95E-03	A	
096-012893	2P096	MDI	NS	NS	NS	NS	PF/MDI	NONE	N347	3	1.37E-03	1.37E-03	A	
94	PDC-1	MDI	NS	NS	NS	NS	PF/MDI	NONE	N347	3	7.67E-04	7.67E-04	A	
49,50	PDG-1	MDI	POPLAI	90	PINE SP	10	PF/MDI	NONE	1,2-PP	3	6.37E-04		A	
97	PDG-1	MDI	HWOOI	99	SWOOD	1	PF/MDI	NONE	1,2-PP	3	4.98E-03		A	
98,99	PDG-1	MDI	NS	NS	NS	NS	PF/MDI	NONE	1,2-PP	3	2.54E-03		A	
95	PDG-1	MDI	HWOOI	99	SWOOD	1	PF/MDI	NONE	N347	3	5.35E-03		A	
97	PDG-1	MDI	HWOOI	99	SWOOD	1	PF/MDI	NONE	N347	3	6.90E-03		A	
98,99	PDG-1	MDI	NS	NS	NS	NS	PF/MDI	NONE	N347	3	3.91E-03		A	
105	PDG-1	MDI	NS	NS	NS	NS	PF/MDI	NONE	N347	3	1.68E-03	3.71E-03	A	

TABLE A-5. (Continued)

Test Code	Unit code	Pollutant(b)	Wood species(c)				Resin type(d)	Control device(e)	Test method(f)	No. of runs	Emission factor, Lb/MSF 3/8		Data Rating	Comment
			Primary	%	Second.	%					Test	Press		
54	PMO-1 MDI		HWOOI	90	SWOOD	10	PF/MDI	NONE	1,2-PP	3	1.78E-05		A	
70	PMO-1 MDI		HWOOI	80	SWOOD	20	PF/MDI	NONE	1,2-PP	3	6.32E-04		A	
57	PMO-1 MDI		HWOOI	80	SWOOD	20	PF/MDI	NONE	N347	3	1.40E-03	6.83E-04	A	
36	PSA-1 MDI		NS	NS	NS	NS	PF/MDI	NONE	1,2-PP	3	3.51E-04		A	
76,77	PSA-1 MDI		NS	NS	NS	NS	PF/MDI	NONE	N347	3	1.40E-03	8.76E-04	A	
Uncontrolled MDI, PF/MDI resins											1,2-PP Ave.	1.53E-03		
											N347 Ave.	3.27E-03		
											Average	2.06E-03		
											Minimum	1.78E-05		
											Maximum	6.90E-03		
											Std. Dev.	2.23E-03		
29	PH1-1 MDI		NS	NS	NS	NS	PF/MDI	RTO	1,2-PP	3	2.61E-05		A	
56	PH1-1 MDI		NS	NS	NS	NS	PF/MDI	RTO	1,2-PP	3	3.09E-05	2.85E-05	A	
56	PH2-1 MDI		NS	NS	NS	NS	PF/MDI	RTO	1,2-PP	3	4.75E-05	4.75E-05	A	
23,24	PSA-1 MDI		PINE SF	100	NA	NA	PF/MDI	RTO	1,2-PP	3	2.63E-05		C	
36	PSA-1 MDI		NS	NS	NS	NS	PF/MDI	RTO	1,2-PP	3	9.70E-06	1.80E-05	A	
47	PSL-1 MDI		SY PINE	100	NA	NA	PF/MDI	RTO	NM142	3	2.17E-04	2.17E-04	B	
RTO-controlled MDI, PF/MDI resins											Average	7.78E-05		
											Minimum	9.70E-06		
											Maximum	2.17E-04		
											Std. Dev.	7.81E-05		
069-062492.1P069	NAPHTHALEN	POPLAI	100	NA	NA	PF	NONE	NM1501		3	5.60E-03	5.60E-03	A	
070-012893.1P070	NAPHTHALEN	PINE SF	85	HWOOI	15	PF	NONE	NM1501		3	4.15E-04	4.15E-04	A	
Uncontrolled naphthalene, PF resin											Average	3.01E-03		
											Minimum	4.15E-04		
											Maximum	5.60E-03		
044-062392.1P044	NOX	SPRUCI	50	UFIR	50	PF	NONE	M7E		2	5.50E-03	5.50E-03	B	
49,50	PDG-1 NOX	POPLAI	90	PINE SP	10	PF/MDI	NONE	M7E		3	3.72E-02	3.72E-02	A	
29	PH1-1 NOX	NS	NS	NS	NS	PF/MDI	NONE	M7E		3	9.25E-02	9.25E-02	A	
38	PH2-1 NOX	NS	NS	NS	NS	PF/MDI	NONE	M7E		3	4.55E-02	4.55E-02	A	
52	PHO-1 NOX	POPLAI	90	HWOOI	10	PF/MDI	NONE	M7E		3	3.52E-02	3.52E-02	A	
59	PNB-1 NOX	HWOOI	100	NA	NA	MDI	NONE	M7E		3	3.13E-02	3.13E-02	A	
23,24	PSA-1 NOX	PINE SF	100	NA	NA	PF/MDI	NONE	M7E		3	7.62E-02	7.62E-02	A	

TABLE A-5. (Continued)

Test Code	Unit code	Pollutant(b)	Wood species(c)				Resin type(d)	Control device(e)	Test method(f)	No. of runs	Emission factor, Lb/MSF 3/8		Data Rating	Comment
			Primary	%	Second.	%					Test	Press		
47	PSL-1	NOX	SY PINE	100	NA	NA	PF/MDI	NONE	M7E	3	1.06E-02	1.06E-02	B	
39	PTH-1	NOX	HWOOI	100	NA	NA	MDI	NONE	M7E	3	7.36E-03	7.36E-03	A	
Uncontrolled NOx											Average	3.79E-02		
											Minimum	5.50E-03		
											Maximum	9.25E-02		
											Std. Dev.	3.02E-02		
29	PH1-1	NOX	NS	NS	NS	NS	PF/MDI	RTO	M7E	3	3.53E-01		A	
56	PH1-1	NOX	NS	NS	NS	NS	PF/MDI	RTO	M7E	3	2.91E-01	3.22E-01	B	
38	PH2-1	NOX	NS	NS	NS	NS	PF/MDI	RTO	M7E	3	3.06E-01		A	
56	PH2-1	NOX	NS	NS	NS	NS	PF/MDI	RTO	M7E	3	2.04E-01	2.55E-01	B	
52	PHO-1	NOX	POPLAI	90	HWOOI	10	PF/MDI	RTO	M7E	3	3.43E-01	3.43E-01	A	
75	PRX-1	NOX	PINE SF	100	NA	NA	PF/MDI	RTO	M7E	3	6.40E-02	6.40E-02	A	
23,24	PSA-1	NOX	PINE SF	100	NA	NA	PF/MDI	RTO	M7E	3	4.25E-01	4.25E-01	A	
47	PSL-1	NOX	SY PINE	100	NA	NA	PF/MDI	RTO	M7E	3	2.48E-01	2.48E-01	B	
RTO-controlled NOx											Average	2.76E-01		
											Minimum	6.40E-02		
											Maximum	4.25E-01		
											Std. Dev.	1.10E-01		
044-062392	1P044	PHENOL	SPRUCI	50	UFIR	50	PF	NONE	TO-8	2	1.49E-02		B	
044-062392	1P044	PHENOL	SPRUCI	50	UFIR	50	PF	NONE	TO-8	2	6.45E-02	3.97E-02	B	
069-062492	1P069	PHENOL	POPLAI	100	NA	NA	PF	NONE	N3500	3	4.52E-02	4.52E-02	A	
070-012893	1P070	PHENOL	PINE SF	85	HWOOI	15	PF	NONE	MM5	3	7.30E-02	7.30E-02	A	
Uncontrolled phenol, PF resin											Average	5.26E-02		
											Minimum	1.49E-02		
											Maximum	7.30E-02		
088-120992	1P088	PHENOL	HWOOI	95	PINE SP	5	PF/MDI	NONE	M5X	3	9.67E-03		A	
088-120992	1P088	PHENOL	HWOOI	95	PINE SP	5	PF/MDI	NONE	N347	3	1.10E-02	1.03E-02	A	
088-121588	2P088	PHENOL	HWOOI	95	SWOOD	5	PF/MDI	NONE	M604	3	7.80E-03	7.80E-03	A	+ unloader
94	PDC-1	PHENOL	NS	NS	NS	NS	PF/MDI	NONE	MM5	3	7.85E-03	7.85E-03	A	
95	PDG-1	PHENOL	HWOOI	99	SWOOD	1	PF/MDI	NONE	MM5	3	2.18E-02		A	
97	PDG-1	PHENOL	HWOOI	99	SWOOD	1	PF/MDI	NONE	MM5	3	2.02E-02		A	
98,99	PDG-1	PHENOL	NS	NS	NS	NS	PF/MDI	NONE	MM5	3	5.79E-03	1.59E-02	A	
23,24	PSA-1	PHENOL	PINE SF	100	NA	NA	PF/MDI	NONE	MM5	3	1.83E-03		C	
36	PSA-1	PHENOL	NS	NS	NS	NS	PF/MDI	NONE	MM5	3	1.58E-03		A	

TABLE A-5. (Continued)

Test Code	Unit code	Pollutant(b)	Wood species(c)				Resin type(d)	Control device(e)	Test method(f)	No. of runs	Emission factor, Lb/MSF 3/8		Data Rating	Comment
			Primary	%	Second.	%					Test	Press		
76,77	PSA-1	PHENOL	NS	NS	NS	NS	PF/MDI	NONE	MM5	3	2.06E-05	1.14E-03	A	
73	PTO-1	PHENOL	HWOOI	90	SWOOD	10	PF/MDI	NONE	MM5	3	6.80E-02	6.80E-02	C	
Uncontrolled phenol, PF/MDI resins											Average	1.85E-02		
											Minimum	2.06E-05		
											Maximum	6.80E-02		
											Std. Dev.	1.92E-02		
23,24	PSA-1	PHENOL	PINE SF	100	NA	NA	PF/MDI	RTO	MM5	3	2.13E-03		C	
36	PSA-1	PHENOL	NS	NS	NS	NS	PF/MDI	RTO	MM5	3	1.75E-03	1.94E-03	A	
47	PSL-1	PHENOL	SY PINE	100	NA	NA	PF/MDI	RTO	NMS330	5	3.21E-03	3.21E-03	B	
RTO-controlled phenol, PF/MDI resins											Average	2.58E-03		
											Minimum	1.75E-03		
											Maximum	3.21E-03		
210-021292	1P210	PM	ASPEN	100	NA	NA	MDI	NONE	M5	3	1.80E-01	1.80E-01	A	
30	PCH-1	PM	NS	NS	NS	NS	MDI	NONE	M5	3	2.55E-01	2.55E-01	A	
39	PTH-1	PM	HWOOI	100	NA	NA	MDI	NONE	M5	3	7.99E-02	7.99E-02	A	
59	PNB-1	PM	HWOOI	100	NA	NA	MDI	NONE	M5	3	1.37E-01	1.37E-01	A	
Uncontrolled PM, MDI resin											Average	1.63E-01		
											Minimum	7.99E-02		
											Maximum	2.55E-01		
044-062392	1P044	PM	SPRUCI	50	UFIR	50	PF	NONE	M5	2	2.38E-01		B	
044-062392	1P044	PM	SPRUCI	50	UFIR	50	PF	NONE	M5	2	2.54E-01		B	
044-092393	1P044	PM	SPRUCI	50	UFIR	50	PF	NONE	M5	3	1.47E-01	2.13E-01	A	
069-062492	1P069	PM	POPLAI	100	NA	NA	PF	NONE	M5	3	2.65E-02	2.65E-02	A	
Uncontrolled PM, PF resin											Average	1.20E-01		
											Minimum	2.65E-02		
											Maximum	2.54E-01		
088-121092	1P088	PM	HWOOI	95	PINE SP	5	PF/MDI	NONE	M5	3	1.28E-01	1.28E-01	A	
096-060490	1P096	PM	ASPEN	100	NA	NA	PF/MDI	NONE	M5	3	1.19E-01		A	
096-060490	1P096	PM	ASPEN	100	NA	NA	PF/MDI	NONE	M5	3	6.50E-02		A	
096-060590	1P096	PM	ASPEN	100	NA	NA	PF/MDI	NONE	M5	3	3.18E-02		A	
096-060590	1P096	PM	ASPEN	100	NA	NA	PF/MDI	NONE	M5	3	5.02E-02		A	
096-060690	1P096	PM	ASPEN	60	PINE SP	40	PF/MDI	NONE	M5	3	4.03E-02		A	
096-060690	1P096	PM	ASPEN	60	PINE SP	40	PF/MDI	NONE	M5	3	5.11E-02		A	
096-060790	1P096	PM	PINE SF	100	NA	NA	PF/MDI	NONE	M5	3	4.67E-02		A	
096-060790	1P096	PM	PINE SF	100	NA	NA	PF/MDI	NONE	M5	3	6.09E-02		A	
096-060890	1P096	PM	PINE SF	100	NA	NA	PF/MDI	NONE	M5	3	8.65E-02		A	

TABLE A-5. (Continued)

Test Code	Unit code	Pollutant(b)	Wood species(c)				Resin type(d)	Control device(e)	Test method(f)	No. of runs	Emission factor, Lb/MSF 3/8		Data Rating	Comment
			Primary	%	Second.	%					Test	Press		
096-060890	1P096	PM	PINE SF	100	NA	NA	PF/MDI	NONE	M5	3	6.45E-02	6.16E-02	A	
211-022592	1P211	PM	HWOOI	100	NA	NA	PF/MDI	NONE	M5	3	5.77E-02	5.77E-02	A	
096-012893	2P096	PM	NS	NS	NS	NS	PF/MDI	NONE	M5	3	9.69E-02	9.69E-02	A	
56	PH1-1	PM	NS	NS	NS	NS	PF/MDI	NONE	M5	3	1.21E-01	1.21E-01	A	
56	PH2-1	PM	NS	NS	NS	NS	PF/MDI	NONE	M5	3	2.94E+00	2.94E+00	A	
40,41	PHO-1	PM	NS	NS	NS	NS	PF/MDI	NONE	M5	3	1.71E-02	1.71E-02	A	
54	PMO-1	PM	HWOOI	90	SWOOD	10	PF/MDI	NONE	M5	3	6.39E-02		A	
57	PMO-1	PM	HWOOI	80	SWOOD	20	PF/MDI	NONE	M5	3	9.71E-02		A	
70	PMO-1	PM	HWOOI	80	SWOOD	20	PF/MDI	NONE	M5	3	1.36E-01	9.90E-02	A	
36	PSA-1	PM	NS	NS	NS	NS	PF/MDI	NONE	M5	3	4.49E-02		A	
76,77	PSA-1	PM	NS	NS	NS	NS	PF/MDI	NONE	M5	3	1.38E-01	9.15E-02	A	
47	PSL-1	PM	SY PINE	100	NA	NA	PF/MDI	NONE	M5	3	2.40E-01	2.40E-01	B	
60	PTO-1	PM	HWOOI	90	SWOOD	10	PF/MDI	NONE	M5	3	2.81E-01		A	
71	PTO-1	PM	NS	NS	NS	NS	PF/MDI	NONE	M5	3	7.75E-02		A	
73	PTO-1	PM	HWOOI	90	SWOOD	10	PF/MDI	NONE	M5	3	1.36E-01	1.65E-01	A	
7	PUR-1	PM	US PINE	100	NA	NA	PF/MDI	NONE	M5	3	4.10E-01	4.10E-01	A	
Uncontrolled PM, PF/MDI resins											Average	3.69E-01		
											Minimum	1.71E-02		
											Maximum	2.94E+00		
											Std. Dev.	5.62E-01		
29	PH1-1	PM	NS	NS	NS	NS	PF/MDI	RTO	M5	3	4.64E-02		A	
56	PH1-1	PM	NS	NS	NS	NS	PF/MDI	RTO	M5	3	7.61E-02	6.13E-02	A	
38	PH2-1	PM	NS	NS	NS	NS	PF/MDI	RTO	M5	3	2.73E-02		A	
56	PH2-1	PM	NS	NS	NS	NS	PF/MDI	RTO	M5	3	1.90E-01	1.09E-01	A	
40,41	PHO-1	PM	NS	NS	NS	NS	PF/MDI	RTO	M5	3	9.75E-03	9.75E-03	A	
75	PRX-1	PM	PINE SF	100	NA	NA	PF/MDI	RTO	M5	3	1.58E-02	1.58E-02	A	
23,24	PSA-1	PM	PINE SF	100	NA	NA	PF/MDI	RTO	M5	3	1.29E-02		A	
36	PSA-1	PM	NS	NS	NS	NS	PF/MDI	RTO	M5	3	2.51E-02	1.90E-02	A	
47	PSL-1	PM	SY PINE	100	NA	NA	PF/MDI	RTO	M5	3	7.91E-02	7.91E-02	B	
RTO-controlled PM, PF/MDI resins											Average	4.89E-02		
											Minimum	9.75E-03		
											Maximum	1.90E-01		
											Std. Dev.	5.74E-02		
4	PCO-1	PM	US PINE	100	NA	NA	NS	NONE	M5	3	4.60E-01		A	
044-062392	1P044	PM&CPM	SPRUCI	50	UFIR	50	PF	NONE	M5/OD7	2	5.59E-01		B	
044-062392	1P044	PM&CPM	SPRUCI	50	UFIR	50	PF	NONE	M5/OD7	2	4.66E-01		B	

TABLE A-5. (Continued)

Test Code	Unit code	Pollutant(b)	Wood species(c)				Resin type(d)	Control device(e)	Test method(f)	No. of runs	Emission factor, Lb/MSF 3/8		Data Rating	Comment
			Primary	%	Second.	%					Test	Press		
044-092393.1P044 PM&CPM			SPRUCI	50	UFIR	50	PF	NONE	M5	3	3.31E-01		A	
088-121092.1P088 PM&CPM			HWOOI	95	PINE SP	5	PF/MDI	NONE	M5/202	3	3.60E-01		A	
096-012893.2P096 PM&CPM			NS	NS	NS	NS	PF/MDI	NONE	M5/202	3	1.49E-01		A	
096-060490.1P096 PM&CPM			ASPEN	100	NA	NA	PF/MDI	NONE	M5/202	3	1.75E-01		A	
096-060490.1P096 PM&CPM			ASPEN	100	NA	NA	PF/MDI	NONE	M5/202	3	1.78E-01		A	
096-060590.1P096 PM&CPM			ASPEN	100	NA	NA	PF/MDI	NONE	M5/202	3	1.22E-01		A	
096-060590.1P096 PM&CPM			ASPEN	100	NA	NA	PF/MDI	NONE	M5/202	3	1.01E-01		A	
096-060690.1P096 PM&CPM			ASPEN	60	PINE SP	40	PF/MDI	NONE	M5/202	3	1.28E-01		A	
096-060690.1P096 PM&CPM			ASPEN	60	PINE SP	40	PF/MDI	NONE	M5/202	3	1.57E-01		A	
096-060790.1P096 PM&CPM			PINE SP	100	NA	NA	PF/MDI	NONE	M5/202	3	9.29E-02		A	
096-060790.1P096 PM&CPM			PINE SP	100	NA	NA	PF/MDI	NONE	M5/202	3	1.04E-01		A	
096-060890.1P096 PM&CPM			PINE SP	100	NA	NA	PF/MDI	NONE	M5/202	3	1.44E-01		A	
096-060890.1P096 PM&CPM			PINE SP	100	NA	NA	PF/MDI	NONE	M5/202	3	2.74E-01		A	
210-021292.1P210 PM&CPM			ASPEN	100	NA	NA	MDI	NONE	M5/202	3	2.04E-01		A	
211-022592.1P211 PM&CPM			HWOOI	100	NA	NA	PF/MDI	NONE	M5	3	6.07E-02		A	
044-092393.1P044 PM10			SPRUCI	50	UFIR	50	PF	NONE	M201A	3	1.04E-01	1.04E-01	A	
Uncontrolled PM-10, PF resin											Average	1.04E-01		
211-022692.1P211 PM10			HWOOI	100	NA	NA	PF/MDI	NONE	M201A	3	1.08E-01	1.08E-01	A	
Uncontrolled PM-10, PF/MDI resins											Average	1.08E-01		
044-092393.1P044 PM10&CPM			SPRUCI	50	UFIR	50	PF	NONE	M201A/OD	3	2.87E-01		A	
211-022692.1P211 PM10&CPM			HWOOI	100	NA	NA	PF/MDI	NONE	M5/202	3	1.23E-01		A	
225-020692.2P225 PM10&CPM			HWOOI	100	NA	NA	PF/MDI	NONE	M201A	3	3.37E-01		A	
49,50 PDG-1 SO2			POPLAI	90	PINE SP	10	PF/MDI	NONE	M6C	3	3.73E-02	3.73E-02	A	
Uncontrolled SO2											Average	3.73E-02		
210-021292.1P210 VOC			ASPEN	100	NA	NA	MDI	NONE	M25	3	5.39E-01		A	
210-022389.1P210 VOC			ASPEN	100	NA	NA	MDI	NONE	M25	3	3.91E-01	4.65E-01	A	+ unloader
30 PCH-1 VOC			NS	NS	NS	NS	MDI	NONE	M25A	3	9.34E-01	9.34E-01	A	+FOR(0.0638)
39 PTH-1 VOC			HWOOI	100	NA	NA	MDI	NONE	M25A	3	2.81E-01	2.81E-01	A	+FOR(0.0638)
59 PNB-1 VOC			HWOOI	100	NA	NA	MDI	NONE	M25A	3	1.05E-01	1.05E-01	A	+FOR(0.0638)
Uncontrolled VOC as propane, MDI resin											Average	4.46E-01		
											Minimum	1.05E-01		
											Maximum	9.34E-01		
											Std. Dev.	3.14E-01		
044-062392.1P044 VOC			SPRUCI	50	UFIR	50	PF	NONE	M25A	2	1.52E-01		B	+FOR(0.0431)
044-092393.1P044 VOC			SPRUCI	50	UFIR	50	PF	NONE	M25A	3	2.65E-01	2.09E-01	A	+FOR(0.0431)
069-062492.1P069 VOC			POPLAI	100	NA	NA	PF	NONE	M25A	3	8.09E-02	8.09E-02	A	+FOR(0.0431)

TABLE A-5. (Continued)

Test Code	Unit code	Pollutant(b)	Wood species(c)				Resin type(d)	Control device(e)	Test method(f)	No. of runs	Emission factor, Lb/MSF 3/8		Data Rating	Comment
			Primary	%	Second.	%					Test	Press		
127-082090.1P127	VOC	ASPEN	100	NA	NA	NA	PF	NONE	M25	3	4.39E-01		A	
127-092289.1P127	VOC	ASPEN	100	NA	NA	NA	PF	NONE	M25	3	1.52E+00	9.81E-01	A	
212-100991.1P212	VOC	HWOOI	10	SWOOD	90	90	PF	NONE	M25	3	8.10E-01	8.10E-01	A	+ unloader
Uncontrolled VOC as propane, PF resin											Average	5.20E-01		
											Minimum	8.09E-02		
											Maximum	1.52E+00		
											Std. Dev.	5.45E-01		
083-011990.1P083	VOC	ASPEN	95	PINE SP	5	5	PF/MDI	NONE	M25A	3	9.95E-01		A	+FOR(0.0629); + unloa
083-012090.1P083	VOC	ASPEN	95	PINE SP	5	5	PF/MDI	NONE	M25A	3	5.06E-01	7.50E-01	A	+FOR(0.0629); + unloa
088-121092.1P088	VOC	HWOOI	95	PINE SP	5	5	PF/MDI	NONE	M25A	3	2.17E-01	2.17E-01	A	+FOR(0.0629)
211-022692.1P211	VOC	HWOOI	100	NA	NA	NA	PF/MDI	NONE	M25A	3	2.58E-01	2.58E-01	A	+FOR(0.0629)
088-121588.2P088	VOC	HWOOI	95	SWOOD	5	5	PF/MDI	NONE	M25A	3	1.88E-01	1.88E-01	A	+FOR(0.0629); + unloa
096-012893.2P096	VOC	NS	NS	NS	NS	NS	PF/MDI	NONE	M25	3	2.59E-01	2.59E-01	A	
225-020692.2P225	VOC	HWOOI	100	NA	NA	NA	PF/MDI	NONE	M25	3	3.33E-01	3.33E-01	A	
94	PDC-1 VOC	NS	NS	NS	NS	NS	PF/MDI	NONE	M25A	3	1.76E-01		A	+FOR(0.0629)
94	PDC-1 VOC	NS	NS	NS	NS	NS	PF/MDI	NONE	M25A	3	1.76E-01	1.76E-01	A	+FOR(0.0629)
49,50	PDG-1 VOC	POPLAI	90	PINE SP	10	10	PF/MDI	NONE	M25A	3	2.31E-01		A	+FOR(0.0629)
95	PDG-1 VOC	HWOOI	99	SWOOD	1	1	PF/MDI	NONE	M25A	3	1.47E-01		A	+FOR(0.0629)
96	PDG-1 VOC	HWOOI	95	SWOOD	5	5	PF/MDI	NONE	M25A	3	4.33E-01		A	+FOR(0.0629)
97	PDG-1 VOC	HWOOI	99	SWOOD	1	1	PF/MDI	NONE	M25A	3	2.83E-01		A	+FOR(0.0629)
98,99	PDG-1 VOC	NS	NS	NS	NS	NS	PF/MDI	NONE	M25A	3	3.14E-01	2.82E-01	A	+FOR(0.0629)
29	PH1-1 VOC	NS	NS	NS	NS	NS	PF/MDI	NONE	M25A	3	2.07E-01		A	+FOR(0.0629)
56	PH1-1 VOC	NS	NS	NS	NS	NS	PF/MDI	NONE	M25A	3	3.57E-01	2.82E-01	A	+FOR(0.0629)
38	PH2-1 VOC	NS	NS	NS	NS	NS	PF/MDI	NONE	M25A	3	6.40E-01		A	+FOR(0.0629)
56	PH2-1 VOC	NS	NS	NS	NS	NS	PF/MDI	NONE	M25A	3	4.62E-01	5.51E-01	A	+FOR(0.0629)
40,41	PHO-1 VOC	NS	NS	NS	NS	NS	PF/MDI	NONE	M25A	3	2.35E-01	2.35E-01	A	+FOR(0.0629)
54	PMO-1 VOC	HWOOI	90	SWOOD	10	10	PF/MDI	NONE	M25A	3	2.62E-01		A	+FOR(0.0629)
57	PMO-1 VOC	HWOOI	80	SWOOD	20	20	PF/MDI	NONE	M25A	3	3.27E-01		A	+FOR(0.0629)
70	PMO-1 VOC	HWOOI	80	SWOOD	20	20	PF/MDI	NONE	M25A	3	2.01E-01	2.63E-01	A	+FOR(0.0629)
75	PRX-1 VOC	PINE SF	100	NA	NA	NA	PF/MDI	NONE	M25A	3	1.07E+00	1.07E+00	A	+FOR(0.0629)
23,24	PSA-1 VOC	PINE SF	100	NA	NA	NA	PF/MDI	NONE	M25A	3	2.59E+00		A	+FOR(0.0629)
36	PSA-1 VOC	NS	NS	NS	NS	NS	PF/MDI	NONE	M25A	3	1.97E-01		A	+FOR(0.0629)

TABLE A-5. (Continued)

Test Code	Unit code	Pollutant(b)	Wood species(c)				Resin type(d)	Control device(e)	Test method(f)	No. of runs	Emission factor, Lb/MSF 3/8		Data Rating	Comment
			Primary	%	Second.	%					Test	Press		
76,77	PSA-1 VOC		NS	NS	NS	NS	PF/MDI	NONE	M25A	3	1.67E-01	9.86E-01	B	+FOR(0.0629)
47	PSL-1 VOC		SY PINE	100	NA	NA	PF/MDI	NONE	M25A	5	1.82E+00	1.82E+00	B	+FOR(0.0629)
7	PUR-1 VOC		US PINE	100	NA	NA	PF/MDI	NONE	M25A	3	1.26E+00	1.26E+00	A	+FOR(0.0629)
Uncontrolled VOC as propane, PF/MDI resins											Average	5.58E-01		
											Minimum	1.47E-01		
											Maximum	2.59E+00		
											Std. Dev.	5.67E-01		
73	PTO-1 VOC		HWOOI	90	SWOOD	10	PF/MDI	NONE	M25A	3	2.52E-01		C	+FOR(0.0629)
29	PH1-1 VOC		NS	NS	NS	NS	PF/MDI	RTO	M25A	3	1.86E-02		A	+FOR(0.00426)
56	PH1-1 VOC		NS	NS	NS	NS	PF/MDI	RTO	M25A	3	1.77E-02	1.81E-02	A	+FOR(0.00426)
38	PH2-1 VOC		NS	NS	NS	NS	PF/MDI	RTO	M25A	3	4.42E-02		A	+FOR(0.00426)
56	PH2-1 VOC		NS	NS	NS	NS	PF/MDI	RTO	M25A	3	1.36E-02	2.89E-02	A	+FOR(0.00426)
40,41	PHO-1 VOC		NS	NS	NS	NS	PF/MDI	RTO	M25A	3	1.00E-02	1.00E-02	A	+FOR(0.00426)
75	PRX-1 VOC		PINE SF	100	NA	NA	PF/MDI	RTO	M25A	3	5.04E-02	5.04E-02	A	+FOR(0.00426)
23,24	PSA-1 VOC		PINE SF	100	NA	NA	PF/MDI	RTO	M25A	3	5.47E-02		B	+FOR(0.00426)
36	PSA-1 VOC		NS	NS	NS	NS	PF/MDI	RTO	M25A	3	1.01E-02	3.24E-02	A	+FOR(0.00426)
47	PSL-1 VOC		SY PINE	100	NA	NA	PF/MDI	RTO	M25A	5	1.01E-01	1.01E-01	B	+FOR(0.00426)
RTO-controlled VOC as propane, PF/MDI resins											Average	4.02E-02		
											Minimum	1.00E-02		
											Maximum	1.01E-01		
											Std. Dev.	3.04E-02		
096-060490	1P096 VOC		ASPEN	100	NA	NA	PF/MDI	NONE	M25A	1	5.77E-02		D	
096-060490	1P096 VOC		ASPEN	100	NA	NA	PF/MDI	NONE	M25A	1	8.21E-02		D	
096-060590	1P096 VOC		ASPEN	100	NA	NA	PF/MDI	NONE	M25A	1	9.17E-02		D	
096-060590	1P096 VOC		ASPEN	100	NA	NA	PF/MDI	NONE	M25A	1	3.04E-02		D	
096-060690	1P096 VOC		ASPEN	60	PINE SP	40	PF/MDI	NONE	M25A	1	1.55E-01		D	
096-060690	1P096 VOC		ASPEN	60	PINE SP	40	PF/MDI	NONE	M25A	1	2.68E-01		D	
096-060790	1P096 VOC		PINE SF	100	NA	NA	PF/MDI	NONE	M25A	1	8.66E-01		D	
096-060790	1P096 VOC		PINE SF	100	NA	NA	PF/MDI	NONE	M25A	1	9.09E-01		D	
096-060890	1P096 VOC		PINE SF	100	NA	NA	PF/MDI	NONE	M25A	1	1.12E+00		D	
096-060890	1P096 VOC		PINE SF	100	NA	NA	PF/MDI	NONE	M25A	1	6.89E-01		D	
4	PCO-1 VOC		US PINE	100	NA	NA	NS	NONE	M25A	3	1.71E+00		A	

(a) NS = not specified. NA = not applicable. Lb/MSF 3/8 = pounds of pollutant per thousand square feet of 3/8-in. thick panel.

(b) Pollutant codes are identified in Table 4-6. Factors for VOC on an as propane basis.

(c) Wood species: SPRUCE = spruce; UFIR = unspecified fir; POPLAR = poplar; HWOOD = unspecified hardwood;
PINE SP = unknown pine species; ASPEN = aspen; SWOOD = unspecified softwood.

TABLE A-5. (Continued)

(d) Resin type: PF = phenol-formaldehyde; MDI = methylene bisphenyl isocyanate.

(e) Control device: RTO = regenerative thermal oxidizer.

(f) Test method: M10 = EPA Method 10; M3 = EPA Method 3; M3A = EPA Method 3A; M202 = EPA Method 202; OD7 = ODEQ 7; M5 = EPA Method 5; WDNR = Wisconsin Department of Natural Resources method; M0011 = BIF Method 0011; N3500 = NIOSH 3500; MN3500 = modified NIOSH 3500; P&CAM125 = P&CAM 125; TO-5 = TO-5; ACET = NCASI Acetylacetone Method; N347 = NIOSH P&CAM 347; 1,2-PP = 1-(2-pyridyl) piperazine method for MDI; NM142 = NIOSH Method 142; NM1501 = NIOSH Method 1501; M7E = EPA Method 7E; TO-8 = TO-8; MM5 = modified EPA Method 5; M5X = EPA Method 5 type train with NaOH in the impingers; M604 = EPA Method 604; NMS330 = NIOSH Method S330; M201A = EPA Method 201A; M6C = EPA Method 6C; M25 = EPA Method 25; M25A = EPA Method 25A.

TABLE A-4. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
4	DCO-3	FOR	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M0011	3	5.10E-02	5.10E-02	A	
5	DNW-1	FOR	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M0011	3	2.40E-02	2.40E-02	A	
5	DNW-2	FOR	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M0011	3	5.60E-02	5.60E-02	A	
7	DUR-1	FOR	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M0011	3	1.50E-01	1.50E-01	C	
7	DUR-2	FOR	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M0011	3	2.80E-02	2.80E-02	B	
Uncontrolled formaldehyde, direct wood-fired, pines												Average	6.67E-02		
												Minimum	1.70E-02		
												Maximum	1.50E-01		
												Std. Dev.	4.49E-02		
041-052192	XD041	FOR	DFIRE	WREF	SY PINI	60	HWOOD	40	CYC	P&CAM125	2	3.70E-02		B	mixed species
044-102588	XD044	FOR	DFIRE	SDUST	SPRUCI	50	UFIR	50	CYC	P&CAM125	3	5.83E-03		A	mixed species
215-042088	XD215	FOR	DFIRE	WREF	HWOOI	45	PINE SP	55	CYC	NM1501	3	2.82E-01		A	mixed species
215-062591	XD215	FOR	DFIRE	WREF	SY PINI	40	HWOOD	60	CYC	M0011	3	4.06E-01		A	mixed species
42	DUR-1	FOR	DFIRE	WREF	NS	NS	NS	NS	CYC	M0011	3	1.30E-01		B	unkn. species
42	DUR-2	FOR	DFIRE	WREF	NS	NS	NS	NS	CYC	M0011	3	1.65E-01		C	unkn. species
43	DNW-1	FOR	DFIRE	WREF	NS	NS	NS	NS	CYC	M0011	3	1.18E-01		B	unkn. species
44	DCO-1	FOR	DFIRE	WREF	NS	NS	NS	NS	CYC	M0011	3	1.26E-01		B	unkn. species
44	DCO-2	FOR	DFIRE	WREF	NS	NS	NS	NS	CYC	M0011	3	1.38E-01		B	unkn. species
44	DCO-3	FOR	DFIRE	WREF	NS	NS	NS	NS	CYC	M0011	3	1.05E-01		B	unkn. species
070-062891	1D070	FOR	DFIRE	NS	PINE SF	85	HWOOD	15	MCLO	M0011	2	3.50E-03		B	mixed species
070-062891	3D070	FOR	DFIRE	NS	PINE SF	85	HWOOD	15	MCLO	MM0011	3	2.43E-02		A	mixed species
070-102292	3D070	FOR	DFIRE	NS	PINE SF	85	HWOOD	15	MCLO	M0011	3	2.74E-01		A	mixed species
070-102292	3D070	FOR	DFIRE	NS	PINE SF	85	HWOOD	15	MCLO	TO-11	3	5.46E-01		A	mixed species
096-012693	2D096	FOR	DFIRE	DFINE	ASPEN	80	PINE SP	20	MCLO	M0011	3	9.23E-02		A	mixed species
94	DDC-1	FOR	DFIRE	WREF	NS	NS	NS	NS	MCLO	M0011	3	6.47E-02		A	unkn. species
210-021192	1D210	FOR	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M0011	3	1.26E-01		A	
210-042292	1D210	FOR	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M0011	3	8.87E-02	1.08E-01	A	
Uncontrolled formaldehyde, direct wood-fired, Aspen												Average	1.08E-01		
												Minimum	8.87E-02		
												Maximum	1.26E-01		
088-120892	1D088	FOR	DFIRE	WREF	HWOOI	95	PINE SP	5	EFB	M0011	3	1.01E-01	1.01E-01	A	
210-021192	1D210	FOR	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M0011	3	1.26E-01		A	
210-042292	1D210	FOR	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M0011	3	8.87E-02	1.08E-01	A	
211-012992	1D211	FOR	DFIRE	WREF	HWOOI	100	NA	NA	EFB	M0011	3	1.92E-04	1.92E-04	A	
225-020792	1D225	FOR	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M0011	3	1.54E-01	1.54E-01	A	
211-013092	2D211	FOR	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M0011	3	1.34E-04	1.34E-04	A	

TABLE A-4. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
211-012892	3D211	FOR	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M0011	3	1.65E-04	1.65E-04	A	
95	DDG-1	FOR	DFIRE	WREF	HWOOI	99	SWOOD	1	MCLO/EFB	M0011	3	1.07E-01		A	
97	DDG-1	FOR	DFIRE	WREF	HWOOI	99	SWOOD	1	MCLO/EFB	M0011	3	7.78E-02	9.24E-02	A	
54	DMO-1	FOR	DFIRE	WREF	HWOOI	90	SWOOD	10	MCLO/WESP	M0011	3	2.15E-01	2.15E-01	A	
59	DNB-1	FOR	DFIRE	WREF	HWOOI	100	NA	NA	CYC	M0011	3	5.69E-02		A	
59	DNB-1	FOR	DFIRE	WREF	HWOOI	100	NA	NA	WESP	M0011	3	2.67E-01	1.62E-01	A	
73	DTO-1	FOR	DFIRE	WREF	HWOOI	90	SWOOD	10	MCLO	M0011	3	4.40E-02	4.40E-02	A	
73	DTO-12	FOR	DFIRE	WREF	HWOOI	90	SWOOD	10	MCLO/WESP	M0011	3	1.04E-01	1.04E-01	A	
73	DTO-2	FOR	DFIRE	WREF	HWOOI	90	SWOOD	10	MCLO	M0011	3	2.75E-02	2.75E-02	A	
Uncontrolled formaldehyde, direct wood-fired, hardwood												Average	8.40E-02		
												Minimum	1.34E-04		
												Maximum	2.67E-01		
												Std. Dev.	7.77E-02		
211-041191	1D211	FOR	DFIRE	WREF	HWOOI	100	NA	NA	EFB	MN3500	3	7.87E-01		D	N3500
096-060590	1D096	FOR	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	MN3500	3	3.32E-02		D	N3500
096-060590	1D096	FOR	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	MN3500	3	7.58E-02		D	N3500
096-060790	1D096	FOR	DFIRE	DFINE	PINE SF	100	NA	NA	EFB	MN3500	3	1.34E-03		D	N3500
096-060890	1D096	FOR	DFIRE	DFINE	PINE SF	100	NA	NA	EFB	MN3500	3	8.50E-03		D	N3500
174-041191	1D174	FOR	DFIRE	SDUST	HWOOI	40	SWOOD	60	EFB	N3500	3	9.00E-01		D	mixed species
174-041191	2D174	FOR	DFIRE	FINES	HWOOI	40	SWOOD	60	EFB	N3500	3	2.30E-01		D	mixed species
98,99	DDG-1	FOR	DFIRE	WREF	NS	NS	NS	NS	MCLO/EFB	M0011	3	5.57E-02		A	unkn. species
35	DTO-12	FOR	DFIRE	NGAS	HWOOI	90	SWOOD	10	MCLO/WESP	M0011	3	3.62E-02	3.62E-02	A	
Uncontrolled formaldehyde, direct natural gas-fired, hardwood												Average	3.62E-02		
069-071692	2D069	FOR	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M0011	1	NS		NR	
069-081491	1D069	FOR	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M0011	3	NS		NR	
069-081491	1D069	FOR	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M0011	3	NS		NR	
069-081591	2D069	FOR	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M0011	2	NS		NR	
069-081591	2D069	FOR	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M0011	2	NS		NR	
57	DMO-1	FOR	DFIRE	WREF	HWOOI	80	SWOOD	20	MCLO/WESP	M0011	3	6.76E-02		A	mixed species
70	DMO-1	FOR	DFIRE	WREF	HWOOI	80	SWOOD	20	MCLO/WESP	M0011	3	2.88E-01		A	mixed species
041-052192	XD041	FOR	DFIRE	WREF	SY PINI	60	HWOOD	40	WESP	P&CAM125	2	7.80E-02		B	mixed species
044-092193	XD044	FOR	DFIRE	SDUST	NS	NS	NA	NA	WESP	TO-5	3	NS		NR	unkn. species
044-092193	XD044	FOR	DFIRE	SDUST	NS	NS	NA	NA	WESP	M0011	3	NS		NR	unkn. species
044-092193	XD044	FOR	DFIRE	SDUST	SPRUCI	50	UFIR	50	WESP	M0011	3	NS		NR	mixed species
044-092193	XD044	FOR	DFIRE	SDUST	SPRUCI	50	UFIR	50	WESP	TO-5	3	NS		NR	mixed species

TABLE A-4. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
044-10258E	XD044	FOR	DFIRE	SDUST	SPRUCI	50	UFIR	50	WESP	P&CAM125	3	2.60E-03		A	mixed species
044-10258E	XD044	FOR	DFIRE	SDUST	POPLAI	39	SWOOD	61	WESP	P&CAM125	1	NS		NR	mixed species
044-10258E	XD044	FOR	DFIRE	SDUST	POPLAI	39	SWOOD	61	WESP	P&CAM125	1	NS		NR	mixed species
070-031992	2D070	FOR	DFIRE	NS	PINE SF	85	HWOOD	15	WESP	M0011	3	4.97E-02		A	mixed species
070-042392	1D070	FOR	DFIRE	NS	PINE SF	85	HWOOD	15	WESP	M0011	3	2.30E-01		A	mixed species
070-042492	3D070	FOR	DFIRE	NS	PINE SF	85	HWOOD	15	WESP	M0011	3	4.11E-01		A	mixed species
070-062891	1D070	FOR	DFIRE	NS	PINE SF	85	HWOOD	15	WESP	M0011	3	4.33E-03		A	mixed species
070-062891	3D070	FOR	DFIRE	NS	PINE SF	85	HWOOD	15	WESP	MM0011	3	1.13E-02		A	mixed species
070-102292	3D070	FOR	DFIRE	NS	PINE SF	85	HWOOD	15	WESP	M0011	3	3.48E-01		A	mixed species
070-102292	3D070	FOR	DFIRE	NS	PINE SF	85	HWOOD	15	WESP	TO-11	3	4.28E-01		A	mixed species
096-012693	2D096	FOR	DFIRE	DFINE	ASPEN	80	PINE SP	20	WESP	M0011	3	6.23E-02		A	mixed species
215-04208E	XD215	FOR	DFIRE	WREF	HWOOI	45	PINE SP	55	WESP	NM1501	3	2.78E-01		A	mixed species
215-062591	XD215	FOR	DFIRE	WREF	SY PINI	40	HWOOD	60	WESP	M0011	3	2.73E-01		A	mixed species
23,24	DSA-12	FOR	DFIRE	WREF	PINE SF	100	NA	NA	WESP/RTO	M0011	3	3.37E-02	3.37E-02	A	
RTO-controlled formaldehyde, direct wood-fired, pines												Average	3.37E-02		
59	DNB-1	FOR	DFIRE	WREF	HWOOI	100	NA	NA	WESP/RTO	M0011	3	1.69E-02	1.69E-02	A	
RTO-controlled formaldehyde, direct wood-fired, hardwood												Average	1.69E-02		
42	DUR-12	FOR	DFIRE	WREF	NS	NS	NS	NS	MCLO/RTO	M0011	3	5.39E-03		B	unkn. species
43	DNW-1	FOR	DFIRE	WREF	NS	NS	NS	NS	MCLO/RTO	M0011	3	8.23E-03		B	unkn. species
44	DCO-12	FOR	DFIRE	WREF	NS	NS	NS	NS	MCLO/RTO	M0011	3	3.72E-02		B	unkn. species
32	DH1-12	FOR	DFIRE	WREF	NS	NS	NS	NS	EFB/RTO	M0011	3	5.52E-02		B	unkn. species
32	DH2-12	FOR	DFIRE	WREF	NS	NS	NS	NS	MCLO/EFB/RT	M0011	3	5.30E-02		B	unkn. species
29	DH1-12	FOR	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	M0011	3	9.05E-02		B	unkn. species
38	DH2-12	FOR	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	M0011	3	1.17E-01		B	unkn. species
94	DDC-1	HCYANIDE	DFIRE	WREF	NS	NS	NS	NS	MCLO	MM5	3	3.25E-03		A	unkn. species
32	DH1-12	NAPHTHALEN	DFIRE	WREF	NS	NS	NS	NS	EFB/RTO	MM5	3	2.75E-04		B	unkn. species
32	DH2-12	NAPHTHALEN	DFIRE	WREF	NS	NS	NS	NS	MCLO/EFB/RT	MM5	3	1.68E-04		B	unkn. species
32	DH1-12	PHENANTH	DFIRE	WREF	NS	NS	NS	NS	EFB/RTO	MM5	3	6.74E-06		B	unkn. species
32	DH2-12	PHENANTH	DFIRE	WREF	NS	NS	NS	NS	MCLO/EFB/RT	MM5	3	2.56E-06		B	unkn. species
29	DH1-12	PHENOL	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	MM5	3	3.60E-03		B	unkn. species
32	DH1-12	PHENOL	DFIRE	WREF	NS	NS	NS	NS	EFB/RTO	MM5	3	2.92E-03		B	unkn. species
32	DH2-12	PHENOL	DFIRE	WREF	NS	NS	NS	NS	MCLO/EFB/RT	MM5	3	3.74E-03		B	unkn. species
38	DH2-12	PHENOL	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	MM5	3	3.63E-03		B	unkn. species
73	DTO-12	PHENOL	DFIRE	WREF	HWOOI	90	SWOOD	10	MCLO/WESP	MM5	3	4.96E-03	4.96E-03	C	
Uncontrolled phenol, direct wood-fired, hardwood												Average	4.96E-03		

TABLE A-4. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
94	DDC-1	PHENOL	DFIRE	WREF	NS	NS	NS	NS	MCLO	MM5	3	3.40E-03		A	unkn. species
215-062591	XD215	PROPIONALD	DFIRE	WREF	SY PINI	40	HWOOD	60	WESP	M0011	3	1.03E-02		A	mixed species
215-062591	XD215	PROPIONALD	DFIRE	WREF	SY PINI	40	HWOOD	60	WESP	M0011	3	9.33E-03		A	mixed species

(a) NS = not specified. NA = not applicable. Lb/ODT = pounds of pollutant per oven-dried ton of wood material out of dryer.

(b) Pollutant codes are identified in Table 4-6.

(c) Firing type: DFIRE = direct firing.

(d) Fuel types: WREF = wood residue; SDUST = sanderdust; FINES = unspecified fines; DFINE = unspecified dry fines; NGAS = natural gas.

(e) Wood species: SY PINE = Southern yellow pine; HWOOD = unspecified hardwood; SPRUCE = spruce; UFIR = unspecified fir; POPLAR = poplar; SWOOD = unspecified softwood; PINE SP = unknown pine species; ASPEN = aspen; US PINE = unspecified southern pines.

(f) Emission control devices: CYC = cyclone; MCLO = multiclone; EFB = electrified filter bed; WESP = wet electrostatic precipitator; RTO = regenerative thermal oxidizer.

(g) Test method: MM5 = a modification of EPA Method 5; M0011 = BIF Method 0011; M18 = EPA Method 18; P&CAM125 = P&CAM 125; NM1501 = NIOSH Method 1501; MM0011 = modified BIF Method 0011; TO-11 = TO-11; MN3500 = modified NIOSH Method 3500; N3500 = NIOSH Method 3500; TO-5 = TO-5.

TABLE A-3. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
32	DH2-1	CO	DFIRE	WREF	NS	NS	NS	NS	MCLO	M10	3	2.18E+00	6.04E+00	B	
38	DH2-2	CO	DFIRE	WREF	NS	NS	NS	NS	CYC	M10	3	1.96E+01		B	
32	DH2-2	CO	DFIRE	WREF	NS	NS	NS	NS	MCLO	M10	3	5.70E+00	1.27E+01	B	
54	DMO-1	CO	DFIRE	WREF	HWOOI	90	SWOOI	10	MCLO/WESP	M10	3	4.98E+00		A	
57	DMO-1	CO	DFIRE	WREF	HWOOI	80	SWOOI	20	MCLO/WESP	M10	3	8.71E+00		B	
70	DMO-1	CO	DFIRE	WREF	HWOOI	80	SWOOI	20	MCLO/WESP	M10	3	2.32E+00	5.34E+00	A	
59	DNB-1	CO	DFIRE	WREF	HWOOI	100	NA	NA	CYC	M10	3	6.20E+00		A	
59	DNB-1	CO	DFIRE	WREF	HWOOI	100	NA	NA	WESP	M10	3	6.24E+00	6.22E+00	A	
5	DNW-1	CO	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M10	9	1.80E+00	1.80E+00	A	
5	DNW-2	CO	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M10	9	2.80E+00	2.80E+00	A	
75	DRX-1	CO	DFIRE	WREF	PINE SI	100	NA	NA	MCLO	M10	3	4.06E+00	4.06E+00	A	
75	DRX-2	CO	DFIRE	WREF	PINE SI	100	NA	NA	MCLO	M10	3	3.48E+00	3.48E+00	A	
75	DRX-3	CO	DFIRE	WREF	PINE SI	100	NA	NA	MCLO	M10	3	1.24E+00	1.24E+00	A	
75	DRX-4	CO	DFIRE	WREF	PINE SI	100	NA	NA	MCLO	M10	3	1.16E+00	1.16E+00	A	
75	DRX-5	CO	DFIRE	WREF	PINE SI	100	NA	NA	MCLO	M10	3	4.98E+00	4.98E+00	A	
23,24	DSA-1	CO	DFIRE	WREF	PINE SI	100	NA	NA	CYC	M10	3	1.80E+01	1.80E+01	A	
23,24	DSA-123	CO	DFIRE	WREF	PINE SI	100	NA	NA	WESP	M10	3	2.32E+01	2.32E+01	A	
23,24	DSA-2	CO	DFIRE	WREF	PINE SI	100	NA	NA	CYC	M10	3	2.04E+01	2.04E+01	A	
23,24	DSA-3	CO	DFIRE	WREF	PINE SI	100	NA	NA	CYC	M10	3	1.74E+01	1.74E+01	A	
3	DSL-1	CO	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M10	3	2.10E+00	2.10E+00	B	
3	DSL-2	CO	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M10	3	2.30E+00	2.30E+00	B	
3	DSL-4	CO	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M10	3	1.30E+00	1.30E+00	B	
3	DSL-5	CO	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M10	3	5.30E-01	5.30E-01	B	
60	DTO-12	CO	DFIRE	WREF	HWOOI	90	SWOOI	10	MCLO/WESP	M10	3	3.46E-01		A	
73	DTO-12	CO	DFIRE	WREF	HWOOI	90	SWOOI	10	MCLO/WESP	M10	3	2.07E+00	1.21E+00	A	
42	DUR-1	CO	DFIRE	WREF	NS	NS	NS	NS	CYC	M10	3	2.70E+00	2.70E+00	B	
041-05219	XD041	CO	DFIRE	WREF	SY PINI	60	HWOOI	40	WESP	M10	3	4.88E+00	4.88E+00	A	
097-10059	XD097	CO	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M10	3	3.39E+00		A	
097-12208	XD097	CO	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M10	3	7.24E+00	5.32E+00	A	
215-06259	XD215	CO	DFIRE	WREF	SY PINI	40	HWOOI	60	WESP	M10	3	1.87E+00	1.87E+00	A	
Uncontrolled CO, direct wood-fired												Average	5.76E+00		
												Minimum	3.46E-01		
												Maximum	2.32E+01		
												Std. Dev.	5.01E+00		

TABLE A-3. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
070-03199	2D070	CO	DFIRE	NS	PINE SI	85	HWOOI	15	WESP	M10B	3	4.82E+00		A	unkn. fuel
070-04239	1D070	CO	DFIRE	NS	PINE SI	85	HWOOI	15	WESP	M10B	3	1.79E+00		A	unkn. fuel
070-04249	3D070	CO	DFIRE	NS	PINE SI	85	HWOOI	15	WESP	M10B	3	3.52E+00		A	unkn. fuel
37	DHO-1	CO	DFIRE	WREF	NS	NS	NS	NS	CYC	M10	3	1.95E+00		C	discarded
37	DHO-2	CO	DFIRE	WREF	NS	NS	NS	NS	CYC	M10	3	4.25E+00		C	discarded
42	DUR-2	CO	DFIRE	WREF	NS	NS	NS	NS	CYC	M10	3	3.59E+00		C	discarded
43	DNW-1	CO	DFIRE	WREF	NS	NS	NS	NS	CYC	M10	3	4.50E+00		C	discarded
3	DSL-3	CO	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M10	3	5.00E-01		C	discarded
7	DUR-1	CO	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M10	6	2.70E+00		C	discarded
7	DUR-2	CO	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M10	9	9.80E-01		C	discarded
58	DMO-1	CO	DFIRE	WREF	NS	NS	NS	NS	MCLO/WESP	M10	3	1.17E+00		C	discarded
044-09219	XD044	CO	DFIRE	SDUST	NS	NS	NA	NA	WESP	M10	3			NR	
044-09219	XD044	CO	DFIRE	SDUST	SPRUC	50	UFIR	50	WESP	M10	3			NR	
052-01149	XD052	CO	IHEAT	WREF	HWOOI	50	SY PINI	50	WESP	M10	3	1.43E+01		D	suspect data
069-07159	1D069	CO	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M10	3			NR	
069-07169	2D069	CO	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M10	1			NR	
069-07169	2D069	CO	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M10	2			NR	
070-06289	1D070	CO	DFIRE	NS	PINE SI	85	HWOOI	15	WESP	M3	3	3.89E+00		C	Method 3 data
070-10219	3D070	CO	DFIRE	NS	PINE SI	85	HWOOI	15	WESP	?	3	2.81E+00		D	unkn. method
35	DTO-12	CO	DFIRE	NGAS	HWOOI	90	SWOOI	10	MCLO/WESP	M10	3	1.19E+00		A	
60	DTO-12	CO	DFIRE	NGAS	HWOOI	90	SWOOI	10	MCLO/WESP	M10	3	2.40E-01	7.15E-01	A	
Uncontrolled CO, direct natural gas-fired												Average	7.15E-01		
												Minimum	2.40E-01		
												Maximum	1.19E+00		
44	DCO-123	CO	DFIRE	WREF	NS	NS	NS	NS	MCLO/RTO	M10	3	5.61E+00	5.61E+00	B	
32	DH1-12	CO	DFIRE	WREF	NS	NS	NS	NS	EFB/RTO	M10	3	1.71E+00		B	
29	DH1-12	CO	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	M10	3	2.62E+00	2.17E+00	B	
32	DH2-12	CO	DFIRE	WREF	NS	NS	NS	NS	MCLO/EFB/R	M10	3	1.77E+00		B	
38	DH2-12	CO	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	M10	3	2.68E+00		B	
38	DH2-12	CO	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	M10	3	2.85E+00	2.43E+00	B	
37	DHO-12	CO	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	M10	3	6.97E-01	6.97E-01	B	
59	DNB-1	CO	DFIRE	WREF	HWOOI	100	NA	NA	WESP/RTO	M10	3	6.53E-01	6.53E-01	A	
75	DRX-1234	CO	DFIRE	WREF	PINE SI	100	NA	NA	MCLO/RTO	M10	3	7.12E-01	7.12E-01	A	

TABLE A-3. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
23,24	DSA-123	CO	DFIRE	WREF	PINE SF	100	NA	NA	WESP/RTO	M10	3	2.82E+00	2.82E+00	A	
42	DUR-12	CO	DFIRE	WREF	NS	NS	NS	NS	MCLO/RTO	M10	3	1.27E+00	1.27E+00	B	
RTO-controlled CO, direct wood-fired												Average	2.05E+00		
												Minimum	6.53E-01		
												Maximum	5.61E+00		
												Std. Dev.	1.45E+00		
43	DNW-1	CO	DFIRE	WREF	NS	NS	NS	NS	MCLO/RTO	M10	3	4.71E+00		C	discarded
070-062891	1D070	CO	DFIRE	NS	PINE SF	85	HWOOI	15	MCLO	M3	3	4.15E+00		C	Method 3 da
30	DCH-1	CO2	DFIRE	WREF	NS	NS	NS	NS	CYC	M3	3	4.18E+02	4.18E+02	B	
4	DCO-1	CO2	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M3	9	6.90E+02	6.90E+02	B	
4	DCO-3	CO2	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M3	9	7.00E+02	7.00E+02	B	
94	DDC-1	CO2	DFIRE	WREF	NS	NS	NS	NS	MCLO	M3	3	5.72E+02	5.72E+02	A	
11	DDD-1	CO2	DFIRE	SDUST	US PINI	NS	HWOOI	NS	CYC	M3	3	7.10E+02	7.10E+02	B	
95	DDG-1	CO2	DFIRE	WREF	HWOOI	99	SWOOI	1	MCLO/EFB	M3	3	5.73E+02		A	
97	DDG-1	CO2	DFIRE	WREF	HWOOI	99	SWOOI	1	MCLO/EFB	M3	3	5.61E+02		A	
98,99	DDG-1	CO2	DFIRE	WREF	NS	NS	NS	NS	MCLO/EFB	M3	3	5.47E+02		A	
98,99	DDG-1	CO2	DFIRE	WREF	NS	NS	NS	NS	MCLO/EFB	M3	3	4.93E+02		A	
106	DDG-1	CO2	DFIRE	WREF	HWOOI	99	SWOOI	1	MCLO/EFB	M3A	3	3.80E+02	5.11E+02	A	
10	DEL-1	CO2	DFIRE	WREF	US PINI	60	HWOOI	40	MCLO	M3	6	6.70E+02	6.70E+02	B	
29	DH1-1	CO2	DFIRE	WREF	NS	NS	NS	NS	CYC	M3A	3	5.60E+02		B	
32	DH1-1	CO2	DFIRE	WREF	NS	NS	NS	NS	CYC	M3	3	5.88E+02	5.74E+02	B	
29	DH1-2	CO2	DFIRE	WREF	NS	NS	NS	NS	CYC	M3A	3	1.76E+03		B	
32	DH1-2	CO2	DFIRE	WREF	NS	NS	NS	NS	CYC	M3	3	6.32E+02	1.20E+03	B	
38	DH2-1	CO2	DFIRE	WREF	NS	NS	NS	NS	CYC	M3A	3	7.29E+02		B	
32	DH2-1	CO2	DFIRE	WREF	NS	NS	NS	NS	MCLO	M3	3	5.71E+02	6.50E+02	B	
38	DH2-12	CO2	DFIRE	WREF	NS	NS	NS	NS	WESP	M3A	3	7.19E+02	7.19E+02	B	
32	DH2-2	CO2	DFIRE	WREF	NS	NS	NS	NS	MCLO	M3	3	5.54E+02	5.54E+02	B	
57	DMO-1	CO2	DFIRE	WREF	HWOOI	80	SWOOI	20	MCLO/WESP	M3	3	6.07E+02		A	
57	DMO-1	CO2	DFIRE	WREF	HWOOI	80	SWOOI	20	MCLO/WESP	M3	3	6.23E+02		A	
62	DMO-1	CO2	DFIRE	WREF	ASPEN	75	PINE SF	25	MCLO/WESP	M3A	3	3.76E+02		A	
70	DMO-1	CO2	DFIRE	WREF	HWOOI	80	SWOOI	20	MCLO/WESP	M3A	3	5.47E+02		A	
70	DMO-1	CO2	DFIRE	WREF	HWOOI	80	SWOOI	20	MCLO/WESP	M3A	3	5.99E+02	5.50E+02	A	
59	DNB-1	CO2	DFIRE	WREF	HWOOI	100	NA	NA	CYC	M3A	3	7.16E+02		A	
59	DNB-1	CO2	DFIRE	WREF	HWOOI	100	NA	NA	CYC	M3A	3	6.99E+02		A	

TABLE A-3. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
59	DNB-1	CO2	DFIRE	WREF	HWOOI	100	NA	NA	WESP	M3A	3	7.19E+02		A	
59	DNB-1	CO2	DFIRE	WREF	HWOOI	100	NA	NA	WESP	M3A	3	8.65E+02	7.50E+02	A	
5	DNW-1	CO2	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M3	9	1.40E+03		B	
5	DNW-2	CO2	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M3	9	1.20E+03	1.30E+03	B	
23,24	DSA-1	CO2	DFIRE	WREF	PINE SI	100	NA	NA	CYC	M3A	3	5.28E+02		A	
23,24	DSA-1	CO2	DFIRE	WREF	PINE SI	100	NA	NA	CYC	M3A	3	4.67E+02	4.98E+02	A	
23,24	DSA-123	CO2	DFIRE	WREF	PINE SI	100	NA	NA	WESP	M3A	3	5.74E+02	5.74E+02	A	
23,24	DSA-2	CO2	DFIRE	WREF	PINE SI	100	NA	NA	CYC	M3A	3	5.69E+02		A	
23,24	DSA-2	CO2	DFIRE	WREF	PINE SI	100	NA	NA	CYC	M3A	3	5.48E+02	5.59E+02	A	
23,24	DSA-3	CO2	DFIRE	WREF	PINE SI	100	NA	NA	CYC	M3A	3	5.17E+02		A	
23,24	DSA-3	CO2	DFIRE	WREF	PINE SI	100	NA	NA	CYC	M3A	3	5.15E+02	5.16E+02	A	
3	DSL-1	CO2	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M3	3	2.80E+02	2.80E+02	B	
3	DSL-2	CO2	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M3	3	2.20E+02	2.20E+02	B	
3	DSL-4	CO2	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M3	3	2.50E+02	2.50E+02	B	
3	DSL-5	CO2	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M3	3	2.80E+02	2.80E+02	B	
73	DTO-1	CO2	DFIRE	WREF	HWOOI	90	SWOOI	10	MCLO	M3	3	6.86E+02		A	
73	DTO-1	CO2	DFIRE	WREF	HWOOI	90	SWOOI	10	MCLO	M3	3	6.76E+02	6.81E+02	A	
73	DTO-12	CO2	DFIRE	WREF	HWOOI	90	SWOOI	10	MCLO/WESP	M3	3	6.02E+02		A	
73	DTO-12	CO2	DFIRE	WREF	HWOOI	90	SWOOI	10	MCLO/WESP	M3	3	6.14E+02		A	
73	DTO-12	CO2	DFIRE	WREF	HWOOI	90	SWOOI	10	MCLO/WESP	M3	3	6.56E+02	6.24E+02	A	
73	DTO-2	CO2	DFIRE	WREF	HWOOI	90	SWOOI	10	MCLO	M3	3	6.89E+02		A	
73	DTO-2	CO2	DFIRE	WREF	HWOOI	90	SWOOI	10	MCLO	M3	3	6.33E+02	6.61E+02	A	
Uncontrolled CO2, direct wood-fired												Average	6.04E+02		
												Minimum	2.20E+02		
												Maximum	1.76E+03		
												Std. Dev.	2.60E+02		
37	DHO-1	CO2	DFIRE	WREF	NS	NS	NS	NS	CYC	M3A	3	6.59E+02		C	discarded
37	DHO-2	CO2	DFIRE	WREF	NS	NS	NS	NS	CYC	M3A	3	5.51E+02		C	discarded
3	DSL-3	CO2	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M3	3	2.10E+02		C	discarded
4	DCO-2	CO2	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M3	5	1.00E+03		C	discarded
7	DUR-1	CO2	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M3	9	6.90E+02		C	discarded
7	DUR-2	CO2	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M3	9	9.10E+02		C	discarded
75	DRX-1	CO2	DFIRE	WREF	PINE SI	100	NA	NA	MCLO	M3A	3	1.11E+03		D	discarded
75	DRX-2	CO2	DFIRE	WREF	PINE SI	100	NA	NA	MCLO	M3A	3	9.10E+02		D	discarded

TABLE A-3. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
75	DRX-3	CO2	DFIRE	WREF	PINE SI	100	NA	NA	MCLO	M3A	3	9.47E+02		D	discarded
75	DRX-4	CO2	DFIRE	WREF	PINE SI	100	NA	NA	MCLO	M3A	3	8.32E+02		D	discarded
75	DRX-5	CO2	DFIRE	WREF	PINE SI	100	NA	NA	MCLO	M3A	3	9.25E+02		D	discarded
32	DH1-12	CO2	DFIRE	WREF	NS	NS	NS	NS	EFB/RTO	M3	3	7.18E+02		B	
32	DH1-12	CO2	DFIRE	WREF	NS	NS	NS	NS	EFB/RTO	M3	2	6.96E+02		B	
32	DH1-12	CO2	DFIRE	WREF	NS	NS	NS	NS	EFB/RTO	M3	3	7.43E+02		B	
32	DH1-12	CO2	DFIRE	WREF	NS	NS	NS	NS	EFB/RTO	M3	3	7.21E+02		B	
29	DH1-12	CO2	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	M3A	3	8.07E+02		B	
29	DH1-12	CO2	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	M3A	3	6.01E+02		B	
29	DH1-12	CO2	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	M3A	3	6.22E+02	7.01E+02	B	
32	DH2-12	CO2	DFIRE	WREF	NS	NS	NS	NS	MCLO/EFB/R	M3	3	6.61E+02		B	
32	DH2-12	CO2	DFIRE	WREF	NS	NS	NS	NS	MCLO/EFB/R	M3	2	6.75E+02		B	
32	DH2-12	CO2	DFIRE	WREF	NS	NS	NS	NS	MCLO/EFB/R	M3	3	7.70E+02		B	
32	DH2-12	CO2	DFIRE	WREF	NS	NS	NS	NS	MCLO/EFB/R	M3	3	7.14E+02		B	
38	DH2-12	CO2	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	M3A	3	8.01E+02		B	
38	DH2-12	CO2	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	M3A	3	8.28E+02		B	
38	DH2-12	CO2	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	M3A	3	7.87E+02		B	
38	DH2-12	CO2	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	M3A	3	8.18E+02	7.57E+02	B	
37	DHO-12	CO2	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	M3A	3	9.24E+02	9.24E+02	B	
59	DNB-1	CO2	DFIRE	WREF	HWOOI	100	NA	NA	WESP/RTO	M3A	3	6.94E+02		A	
59	DNB-1	CO2	DFIRE	WREF	HWOOI	100	NA	NA	WESP/RTO	M3A	3	7.58E+02	7.26E+02	A	
75	DRX-1234	CO2	DFIRE	WREF	PINE SI	100	NA	NA	MCLO/RTO	M3A	3	7.19E+02		A	
75	DRX-1234	CO2	DFIRE	WREF	PINE SI	100	NA	NA	MCLO/RTO	M3A	3	9.74E+02	8.47E+02	A	
23,24	DSA-123	CO2	DFIRE	WREF	PINE SI	100	NA	NA	WESP/RTO	M3A	3	5.88E+02		A	
23,24	DSA-123	CO2	DFIRE	WREF	PINE SI	100	NA	NA	WESP/RTO	M3A	3	5.77E+02	5.83E+02	A	
RTO-controlled CO2, direct wood-fired												Average	7.56E+02		
												Minimum	5.77E+02		
												Maximum	9.74E+02		
												Std. Dev.	1.01E+02		
60	DTO-12	CO2	DFIRE	NGAS	HWOOI	90	SWOOI	10	MCLO/WESP	M3A	3	3.27E+02	3.27E+02	A	
Uncontrolled CO2, direct natural gas-fired												Average	3.27E+02		
35	DTO-12	CO2	DFIRE	NGAS	HWOOI	90	SWOOI	10	MCLO/WESP	M3	3	1.53E+02		D	discarded

TABLE A-3. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
088-120892	1D088	NOX	DFIRE	WREF	PINE SF	100	NA	NA	EFB	M7	3	5.28E-01	5.28E-01	A	
127-082190	1D127	NOX	DFIRE	WDUS	ASPEN	95	PINE SF	5	EFB	M7	3	1.24E+00	1.24E+00	A	
210-022489	1D210	NOX	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M7	3	7.62E-01	7.62E-01	A	
127-091289	2D127	NOX	DFIRE	WDUS	ASPEN	100	NA	NA	EFB	M7	3	1.51E+00	1.51E+00	A	
30	DCH-1	NOX	DFIRE	WREF	NS	NS	NS	NS	CYC	M7	3	1.59E-01	1.59E-01	B	
44	DCO-1	NOX	DFIRE	WREF	NS	NS	NS	NS	CYC	M7E	3	6.53E-01	6.53E-01	B	
44	DCO-2	NOX	DFIRE	WREF	NS	NS	NS	NS	CYC	M7E	2	9.44E-01		B	
44	DCO-2	NOX	DFIRE	WREF	NS	NS	NS	NS	CYC	M7E	3	9.88E-01	9.66E-01	B	
44	DCO-3	NOX	DFIRE	WREF	NS	NS	NS	NS	CYC	M7E	3	7.45E-01	7.45E-01	B	
95	DDG-1	NOX	DFIRE	WREF	HWOOI	99	SWOOI	1	MCLO/EFB	M7	3	4.68E-01		A	
97	DDG-1	NOX	DFIRE	WREF	HWOOI	99	SWOOI	1	MCLO/EFB	M7	3	7.63E-01		A	
98,99	DDG-1	NOX	DFIRE	WREF	NS	NS	NS	NS	MCLO/EFB	M7	3	2.85E-01		A	
106	DDG-1	NOX	DFIRE	WREF	HWOOI	99	SWOOI	1	MCLO/EFB	M7E	3	5.30E-01	5.12E-01	A	
10	DEL-1	NOX	DFIRE	WREF	US PINI	60	HWOOI	40	MCLO/EFB	M7E	3	5.00E-01	5.00E-01	B	
29	DH1-1	NOX	DFIRE	WREF	NS	NS	NS	NS	CYC	M7E	3	5.11E-01		B	
32	DH1-1	NOX	DFIRE	WREF	NS	NS	NS	NS	CYC	M7	3	6.41E-01	5.76E-01	B	
29	DH1-2	NOX	DFIRE	WREF	NS	NS	NS	NS	CYC	M7E	3	6.36E-01		B	
32	DH1-2	NOX	DFIRE	WREF	NS	NS	NS	NS	CYC	M7	3	3.86E-01	5.11E-01	B	
38	DH2-1	NOX	DFIRE	WREF	NS	NS	NS	NS	CYC	M7E	3	3.65E-01		B	
32	DH2-1	NOX	DFIRE	WREF	NS	NS	NS	NS	MCLO	M7	3	4.23E-01	3.94E-01	B	
38	DH2-12	NOX	DFIRE	WREF	NS	NS	NS	NS	WESP	M7E	3	1.70E-01	1.70E-01	B	
38	DH2-2	NOX	DFIRE	WREF	NS	NS	NS	NS	CYC	M7E	3	5.01E-01		B	
32	DH2-2	NOX	DFIRE	WREF	NS	NS	NS	NS	MCLO	M7	3	3.33E-01	4.17E-01	B	
59	DNB-1	NOX	DFIRE	WREF	HWOOI	100	NA	NA	CYC	M7E	3	5.05E-01		A	
59	DNB-1	NOX	DFIRE	WREF	HWOOI	100	NA	NA	WESP	M7E	3	3.02E-01	4.04E-01	A	
75	DRX-1	NOX	DFIRE	WREF	PINE SF	100	NA	NA	MCLO	M7E	3	1.03E+00	1.03E+00	A	
75	DRX-2	NOX	DFIRE	WREF	PINE SF	100	NA	NA	MCLO	M7E	3	8.34E-01	8.34E-01	A	
75	DRX-3	NOX	DFIRE	WREF	PINE SF	100	NA	NA	MCLO	M7E	3	4.92E-01	4.92E-01	A	
75	DRX-4	NOX	DFIRE	WREF	PINE SF	100	NA	NA	MCLO	M7E	3	6.22E-01	6.22E-01	A	
75	DRX-5	NOX	DFIRE	WREF	PINE SF	100	NA	NA	MCLO	M7E	3	1.12E+00	1.12E+00	A	
23,24	DSA-1	NOX	DFIRE	WREF	PINE SF	100	NA	NA	CYC	M7E	3	6.01E-01	6.01E-01	A	
23,24	DSA-123	NOX	DFIRE	WREF	PINE SF	100	NA	NA	WESP	M7E	3	5.06E-02	5.06E-02	A	
23,24	DSA-2	NOX	DFIRE	WREF	PINE SF	100	NA	NA	CYC	M7E	3	6.13E-01	6.13E-01	A	
23,24	DSA-3	NOX	DFIRE	WREF	PINE SF	100	NA	NA	CYC	M7E	3	7.67E-01	7.67E-01	A	

TABLE A-3. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
60	DTO-12	NOX	DFIRE	WREF	HWOOI	90	SWOOI	10	MCLO/WESP	M7E	3	7.10E-01		A	
73	DTO-12	NOX	DFIRE	WREF	HWOOI	90	SWOOI	10	MCLO/WESP	M7	3	6.31E-01	6.71E-01	A	
42	DUR-1	NOX	DFIRE	WREF	NS	NS	NS	NS	CYC	M7E	3	1.07E+00	1.07E+00	B	
097-10059	XD097	NOX	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M7	3	3.77E-01	3.77E-01	A	
215-06259	XD215	NOX	DFIRE	WREF	SY PINI	40	HWOOI	60	WESP	M7E	3	5.23E-01	5.23E-01	A	
Uncontrolled NOx, direct wood-fired												Average	6.49E-01		
												Minimum	5.06E-02		
												Maximum	1.51E+00		
												Std. Dev.	3.05E-01		
37	DHO-1	NOX	DFIRE	WREF	NS	NS	NS	NS	CYC	M7E	3	3.98E-01		C	discarded
37	DHO-2	NOX	DFIRE	WREF	NS	NS	NS	NS	CYC	M7E	3	2.52E-01		C	discarded
42	DUR-2	NOX	DFIRE	WREF	NS	NS	NS	NS	CYC	M7E	3	1.41E+00		C	discarded
43	DNW-1	NOX	DFIRE	WREF	NS	NS	NS	NS	CYC	M7E	3	8.80E-01		C	discarded
052-01149	XD052	NOX	IHEAT	WREF	HWOOI	50	SY PINI	50	WESP	M7	3	5.95E-01	5.95E-01	A	not reported
Uncontrolled NOx, indirect wood heat; NCASI Dryer A table indicates IHEAT; Dryer B table indicates DFIRE												Average	5.95E-01		
044-09219	XD044	NOX	DFIRE	SDUST	NS	NS	NA	NA	WESP	M7E	3			NR	
044-09219	XD044	NOX	DFIRE	SDUST	SPRUC	50	UFIR	50	WESP	M7E	3			NR	
069-07159	1D069	NOX	DFIRE	FINES	POPLA	100	NA	NA	WESP	M7	3			NR	
069-07169	2D069	NOX	DFIRE	FINES	POPLA	100	NA	NA	WESP	M7	2			NR	
44	DCO-123	NOX	DFIRE	WREF	NS	NS	NS	NS	MCLO/RTO	M7E	3	1.06E+00	1.06E+00	B	
32	DH1-12	NOX	DFIRE	WREF	NS	NS	NS	NS	EFB/RTO	M7	3	5.29E-01		B	
29	DH1-12	NOX	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	M7E	3	4.18E-01	4.74E-01	B	
32	DH2-12	NOX	DFIRE	WREF	NS	NS	NS	NS	MCLO/EFB/R	M7	3	4.72E-01		B	
38	DH2-12	NOX	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	M7E	3	3.29E-01	4.01E-01	B	
37	DHO-12	NOX	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	M7E	3	3.30E-01	3.30E-01	B	
59	DNB-1	NOX	DFIRE	WREF	HWOOI	100	NA	NA	WESP/RTO	M7E	3	4.69E-01	4.69E-01	A	
75	DRX-1234	NOX	DFIRE	WREF	PINE SI	100	NA	NA	MCLO/RTO	M7E	3	9.29E-01	9.29E-01	A	
23,24	DSA-123	NOX	DFIRE	WREF	PINE SI	100	NA	NA	WESP/RTO	M7E	3	5.74E-02	5.74E-02	A	
42	DUR-12	NOX	DFIRE	WREF	NS	NS	NS	NS	MCLO/RTO	M7E	3	1.08E+00	1.08E+00	B	
RTO-controlled NOx, direct wood-fired												Average	6.00E-01		
												Minimum	5.74E-02		
												Maximum	1.08E+00		
												Std. Dev.	3.42E-01		
43	DNW-1	NOX	DFIRE	WREF	NS	NS	NS	NS	MCLO/RTO	M7E	3	1.05E+00		C	discarded

TABLE A-3. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
35	DTO-12	NOX	DFIRE	NGAS	HWOOI	90	SWOOI	10	MCLO/WESP	M7	3	6.82E-01	6.82E-01	A	
Uncontrolled NOx, direct natural gas-fired												Average	6.82E-01		
070-03199	2D070	NOX	DFIRE	NS	PINE SI	85	HWOOI	15	WESP	M7E	2	1.60E-01		C	unkn. fuel
070-04249	3D070	NOX	DFIRE	NS	PINE SI	85	HWOOI	15	WESP	M7E	3	3.53E-01		A	unkn. fuel
59	DNB-1	SO2	DFIRE	WREF	HWOOI	100	NA	NA	WESP/RTO	M6C	3	1.38E-02	1.38E-02	A	
RTO-controlled SO2, direct wood-fired												Average	1.38E-02		
75	DRX-1234	CHROMIUM	DFIRE	WREF	PINE SI	100	NA	NA	MCLO/RTO	M29	3	6.30E-05	6.30E-05	A	
RTO-controlled chromium, direct wood-fired, pines												Average	6.30E-05		

(a) NS = not specified. NA = not applicable. Lb/ODT = pounds of pollutant per oven-dried ton of wood material out of dryer.

(b) Pollutant codes are identified in Table 4-6.

(c) Firing types: DFIRE = direct firing; IHEAT = indirect firing.

(d) Fuel types: WREF = wood residue; SDUST = sanderdust; FINES = unspecified fines; DFINE = unspecified dry fines; WDUST = unspecified wood dust; NGAS = natural gas.

(e) Wood species: SY PINE = Southern yellow pine; HWOOD = unspecified hardwood; SPRUCE = spruce; UFIR = unspecified fir; POPLAR = poplar; SWOOD = unspecified softwood; PINE SP = unknown pine species; ASPEN = aspen; US PINE = unspecified southern pines.

(f) Emission control devices: CYC = cyclone; MCLO = multiclone; EFB = electrified filter bed; WESP = wet electrostatic precipitator; RTO = regenerative thermal oxidizer.

(g) Test method: M10 = EPA Method 10; M10B = EPA Method 10B; M3 = EPA Method 3; M3A = EPA Method 3A; M7 = EPA Method 7; M7E = EPA Method 7E; M6C = EPA Method 6C; M29 = EPA Method 29.

TABLE A-2. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
070-101091	3D070	VOC	DFIRE	NS	PINE SI	85	HWOOI	15	MCLO	M25	3	9.83E+00		A	mixed species
070-101091	3D070	VOC	DFIRE	NS	PINE SI	85	HWOOI	15	MCLO	M25A	3	7.41E+00		A	mixed species
070-102192	3D070	VOC	DFIRE	NS	PINE SI	85	HWOOI	15	MCLO	M25A	3	7.89E+00		A	mixed species
096-012693	2D096	VOC	DFIRE	DFINE	ASPEN	80	PINE SF	20	MCLO	M25	3	3.79E+00		A	mixed species
041-052192	XD041	VOC	DFIRE	WREF	SY PINI	60	HWOOI	40	CYC	M25A	3	3.38E+00		A	mixed species
044-102588	XD044	VOC	DFIRE	SDUST	SPRUC	50	UFIR	50	CYC	M25	3	5.77E+00		A	mixed species
052-011493	XD052	VOC	IHEAT	WREF	HWOOI	50	SY PINI	50	CYC	M25	3	6.96E+00		A	mixed species
052-011493	XD052	VOC	IHEAT	WREF	HWOOI	50	SY PINI	50	CYC	M25A	3	4.76E+00		A	mixed species
215-042089	XD215	VOC	DFIRE	WREF	HWOOI	45	PINE SF	55	CYC	M25	3	6.14E+00		A	mixed species
215-062591	XD215	VOC	DFIRE	WREF	SY PINI	40	HWOOI	60	CYC	M25	3	4.99E+00		A	mixed species
215-062591	XD215	VOC	DFIRE	WREF	SY PINI	40	HWOOI	60	CYC	M25A	3	4.25E+00		A	mixed species
215-062591	YD215	VOC	DFIRE	WREF	SY PINI	40	HWOOI	60	CYC	M25	2	2.41E+00		B	mixed species
215-062591	YD215	VOC	DFIRE	WREF	SY PINI	40	HWOOI	60	CYC	M25	2	2.12E+00		B	mixed species
29	DH1-1	VOC	DFIRE	WREF	NS	NS	NS	NS	CYC	M25A	3	2.18E+00		B	unkn. species
29	DH1-2	VOC	DFIRE	WREF	NS	NS	NS	NS	CYC	M25A	3	3.37E+00		B	unkn. species
30	DCH-1	VOC	DFIRE	WREF	NS	NS	NS	NS	CYC	M25A	3	2.97E+00		B	unkn. species
32	DH1-1	VOC	DFIRE	WREF	NS	NS	NS	NS	CYC	M25A	3	2.99E+00		B	unkn. species
32	DH1-2	VOC	DFIRE	WREF	NS	NS	NS	NS	CYC	M25A	3	2.34E+00		B	unkn. species
37	DHO-1	VOC	DFIRE	WREF	NS	NS	NS	NS	CYC	M25A	3	7.83E-01		C	unkn. species
37	DHO-2	VOC	DFIRE	WREF	NS	NS	NS	NS	CYC	M25A	3	1.18E+00		C	unkn. species
38	DH2-1	VOC	DFIRE	WREF	NS	NS	NS	NS	CYC	M25A	3	4.92E+00		B	unkn. species
38	DH2-2	VOC	DFIRE	WREF	NS	NS	NS	NS	CYC	M25A	3	5.62E+00		B	unkn. species
42	DUR-1	VOC	DFIRE	WREF	NS	NS	NS	NS	CYC	M25A	3	6.59E+00		C	unkn. species
42	DUR-2	VOC	DFIRE	WREF	NS	NS	NS	NS	CYC	M25A	3	8.44E+00		C	unkn. species
43	DNW-1	VOC	DFIRE	WREF	NS	NS	NS	NS	CYC	M25A	3	1.27E+01		C	unkn. species
44	DCO-1	VOC	DFIRE	WREF	NS	NS	NS	NS	CYC	M25A	3	9.23E+00		B	unkn. species
44	DCO-2	VOC	DFIRE	WREF	NS	NS	NS	NS	CYC	M25A	3	1.02E+01		B	unkn. species
44	DCO-3	VOC	DFIRE	WREF	NS	NS	NS	NS	CYC	M25A	3	7.35E+00		B	unkn. species
10	DEL-1	VOC	DFIRE	WREF	US PINI	60	HWOOI	40	MCLO	M25A	3	5.12E+00		A	mixed species
10	DEL-1	VOC	DFIRE	WREF	US PINI	60	HWOOI	40	MCLO	M25	3	3.54E+00		A	mixed species
32	DH2-1	VOC	DFIRE	WREF	NS	NS	NS	NS	MCLO	M25A	3	1.37E+00		C	unkn. species
32	DH2-2	VOC	DFIRE	WREF	NS	NS	NS	NS	MCLO	M25A	3	2.76E+00		C	unkn. species
94	DDC-1	VOC	DFIRE	WREF	NS	NS	NS	NS	MCLO	M25A	3	1.76E+00		A	unkn. species
070-101091	2D070	VOC	DFIRE	NS	PINE SI	85	HWOOI	15	MCLO	M25A	1	7.88E+00		D	1-run data
070-101091	2D070	VOC	DFIRE	NS	PINE SI	85	HWOOI	15	MCLO	M25	1	9.44E+00		D	1-run data

TABLE A-2. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
070-101091	3D070	VOC	DFIRE	NS	PINE SI	85	HWOOI	15	MCLO	M25A	1	9.48E+00		D	1-run data
070-101091	3D070	VOC	DFIRE	NS	PINE SI	85	HWOOI	15	MCLO	M25	1	7.66E+00		D	1-run data
127-082190	1D127	VOC	DFIRE	WDUS	ASPEN	95	PINE SF	5	EFB	M25	3	1.15E+00		A	
127-102290	1D127	VOC	DFIRE	WDUS	ASPEN	96	PINE SF	4	EFB	M25A	3	1.23E+00	1.19E+00	A	+FOR(0.108)
210-021192	1D210	VOC	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M25	3	4.36E+00		A	
210-022489	1D210	VOC	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M25	3	2.97E+00		A	
210-042292	1D210	VOC	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M25	3	1.55E+00	2.96E+00	A	
127-092289	2D127	VOC	DFIRE	WDUS	ASPEN	100	NA	NA	EFB	M25	3	2.13E+00	2.13E+00	A	
083-082990	XD083	VOC	DFIRE	DFINE	ASPEN	95	PINE SF	5	EFB	M25A	3	2.43E+00	2.43E+00	A	+FOR(0.108)
Uncontrolled VOC as propane, direct wood-fired, Aspen												Average	2.18E+00		
												Minimum	1.15E+00		
												Maximum	4.36E+00		
												Std. Dev.	1.13E+00		
088-030989	1D088	VOC	DFIRE	WREF	HWOOI	95	SWOOI	5	EFB	M25A	3	7.27E-01		A	+FOR(0.084)
088-120892	1D088	VOC	DFIRE	WREF	HWOOI	95	PINE SF	5	EFB	M25A	3	1.50E+00		A	+FOR(0.084)
088-121488	1D088	VOC	DFIRE	WREF	HWOOI	95	SWOOI	5	EFB	M25A	3	2.37E+00	1.53E+00	A	+FOR(0.084)
097-061688	1D097	VOC	DFIRE	DFINE	HWOOI	100	NA	NA	MCLO	M25	3	1.35E+00	1.35E+00	A	
127-082190	1D127	VOC	DFIRE	WDUS	ASPEN	95	PINE SF	5	EFB	M25	3	1.15E+00		A	
127-102290	1D127	VOC	DFIRE	WDUS	ASPEN	96	PINE SF	4	EFB	M25A	3	1.21E+00	1.18E+00	A	+FOR(0.084)
210-021192	1D210	VOC	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M25	3	4.36E+00		A	
210-022489	1D210	VOC	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M25	3	2.97E+00		A	
210-042292	1D210	VOC	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M25	3	1.55E+00	2.96E+00	A	
211-012992	1D211	VOC	DFIRE	WREF	HWOOI	100	NA	NA	EFB	M25A	3	1.64E+00		A	+FOR(0.084)
211-041191	1D211	VOC	DFIRE	WREF	HWOOI	100	NA	NA	EFB	M25A	3	1.46E+00	1.55E+00	A	+FOR(0.084)
225-020792	1D225	VOC	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M25	3	9.66E-01	9.66E-01	A	
097-061688	2D097	VOC	DFIRE	DFINE	HWOOI	100	NA	NA	MCLO	M25	3	1.08E+00	1.08E+00	A	
127-092289	2D127	VOC	DFIRE	WDUS	ASPEN	100	NA	NA	EFB	M25	3	2.13E+00	2.13E+00	A	
211-013092	2D211	VOC	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M25A	3	1.65E+00	1.65E+00	A	+FOR(0.084)
211-012892	3D211	VOC	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M25A	3	1.25E+00	1.25E+00	A	+FOR(0.084)
95	DDG-1	VOC	DFIRE	WREF	HWOOI	99	SWOOI	1	MCLO/EFB	M25A	3	9.90E-01		A	+FOR(0.084)
97	DDG-1	VOC	DFIRE	WREF	HWOOI	99	SWOOI	1	MCLO/EFB	M25A	3	1.25E+00	1.12E+00	A	+FOR(0.084)
54	DMO-1	VOC	DFIRE	WREF	HWOOI	90	SWOOI	10	MCLO/WESP	M25A	3	1.95E+00	1.95E+00	A	+FOR(0.084)
59	DNB-1	VOC	DFIRE	WREF	HWOOI	100	NA	NA	CYC	M25A	3	2.24E+00		A	+FOR(0.084)
59	DNB-1	VOC	DFIRE	WREF	HWOOI	100	NA	NA	WESP	M25A	3	1.60E+00	1.92E+00	A	+FOR(0.084)

TABLE A-2. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
39	DTH-1	VOC	DFIRE	WREF	HWOOI	100	NA	NA	CYC	M25A	3	8.28E-01		A	+FOR(0.084)
39	DTH-1	VOC	DFIRE	WREF	HWOOI	100	NA	NA	WESP	M25A	3	1.37E+00	1.10E+00	A	+FOR(0.084)
083-08299	XD083	VOC	DFIRE	DFINE	ASPEN	95	PINE SF	5	EFB	M25A	3	2.41E+00	2.41E+00	A	+FOR(0.084)
097-10059	XD097	VOC	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M25	3	1.58E+00		A	
097-12218	XD097	VOC	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M25	3	1.85E+00	1.71E+00	A	
Uncontrolled VOC as propane, direct wood-fired, hardwood												Average	1.62E+00		
												Minimum	7.27E-01		
												Maximum	4.36E+00		
												Std. Dev.	7.65E-01		
212-10119	1D212	VOC	DFIRE	DFINE	HWOOI	10	SWOOI	90	EFB	M25	3	5.24E+00		A	mixed species
10	DEL-1	VOC	DFIRE	WREF	US PINI	60	HWOOI	40	MCLO/EFB	M25A	3	5.12E+00		B	mixed species
10	DEL-1	VOC	DFIRE	WREF	US PINI	60	HWOOI	40	MCLO/EFB	M25	3	5.12E+00		B	mixed species
98,99	DDG-1	VOC	DFIRE	WREF	NS	NS	NS	NS	MCLO/EFB	M25A	3	2.79E-01		A	unkn. species
096-06059	1D096	VOC	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M25A	1	4.79E-01		D	1-run data
096-06059	1D096	VOC	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M25A	1	1.24E+00		D	1-run data
096-06079	1D096	VOC	DFIRE	DFINE	PINE SF	100	NA	NA	EFB	M25A	1	4.20E+00		D	1-run data
096-06089	1D096	VOC	DFIRE	DFINE	PINE SF	100	NA	NA	EFB	M25A	1	6.51E+00		D	1-run data
73	DTO-12	VOC	DFIRE	WREF	HWOOI	90	SWOOI	10	MCLO/WESP	M25A	3	5.23E-01		C	discarded
70	DMO-1	VOC	DFIRE	WREF	HWOOI	80	SWOOI	20	MCLO/WESP	M25A	3	1.81E+00		A	mixed species
070-03199	2D070	VOC	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	M25	3	6.74E+00		A	mixed species
070-04239	1D070	VOC	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	M25	3	6.12E+00		A	mixed species
070-04249	3D070	VOC	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	M25	3	5.71E+00		A	mixed species
070-06289	1D070	VOC	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	M25	3	1.20E+01		A	mixed species
070-06289	3D070	VOC	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	M25	3	1.04E+01		A	mixed species
070-10109	2D070	VOC	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	M25A	2	1.01E+01		B	mixed species
070-10109	2D070	VOC	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	M25	3	1.34E+01		B	mixed species
070-10109	3D070	VOC	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	M25A	3	7.94E+00		A	mixed species
070-10109	3D070	VOC	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	M25	3	9.00E+00		A	mixed species
070-10219	3D070	VOC	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	M25A	3	8.02E+00		A	mixed species
096-01269	2D096	VOC	DFIRE	DFINE	ASPEN	80	PINE SF	20	WESP	M25	3	3.33E+00		A	mixed species
041-05219	XD041	VOC	DFIRE	WREF	SY PINI	60	HWOOI	40	WESP	M25A	3	3.49E+00		A	mixed species
044-10258	XD044	VOC	DFIRE	SDUST	SPRUC	50	UFIR	50	WESP	M25	3	1.54E+00		A	mixed species
052-01149	XD052	VOC	IHEAT	WREF	HWOOI	50	SY PINI	50	WESP	M25A	3	4.62E+00		A	mixed species
052-01149	XD052	VOC	IHEAT	WREF	HWOOI	50	SY PINI	50	WESP	M25	3	4.07E+00		A	mixed species
215-04208	XD215	VOC	DFIRE	WREF	HWOOI	45	PINE SF	55	WESP	M25	3	2.98E+00		A	mixed species

TABLE A-2. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
215-062591	XD215	VOC	DFIRE	WREF	SY PINI	40	HWOOI	60	WESP	M25	3	4.52E+00		A	mixed species
215-062591	XD215	VOC	DFIRE	WREF	SY PINI	40	HWOOI	60	WESP	M25A	3	3.63E+00		A	mixed species
044-092193	XD044	VOC	DFIRE	SDUST	NS	NS	NA	NA	WESP	M25A	3			NR	
044-092193	XD044	VOC	DFIRE	SDUST	SPRUC	50	UFIR	50	WESP	M25A	3			NR	
069-071592	1D069	VOC	DFIRE	FINES	POPLA	100	NA	NA	WESP	M25A	3			NR	
069-071692	2D069	VOC	DFIRE	FINES	POPLA	100	NA	NA	WESP	M25A	2			NR	
069-081491	1D069	VOC	DFIRE	FINES	POPLA	100	NA	NA	WESP	M25A	2			NR	
069-081491	1D069	VOC	DFIRE	FINES	POPLA	100	NA	NA	WESP	M25A	3			NR	
069-081591	2D069	VOC	DFIRE	FINES	POPLA	100	NA	NA	WESP	M25A	3			NR	
069-081591	2D069	VOC	DFIRE	FINES	POPLA	100	NA	NA	WESP	M25A	3			NR	
070-101091	2D070	VOC	DFIRE	NS	PINE SI	85	HWOOI	15	WESP	M25	1	7.02E+00		D	1-run data
070-101091	2D070	VOC	DFIRE	NS	PINE SI	85	HWOOI	15	WESP	M25A	1	9.20E+00		D	1-run data
070-101091	3D070	VOC	DFIRE	NS	PINE SI	85	HWOOI	15	WESP	M25A	1	9.24E+00		D	1-run data
070-101091	3D070	VOC	DFIRE	NS	PINE SI	85	HWOOI	15	WESP	M25	1	7.71E+00		D	1-run data
75	DRX-1234	VOC	DFIRE	WREF	PINE SI	100	NA	NA	MCLO/RTO	M25A	3	1.71E-01	1.71E-01	A	+FOR(0.0337)
23,24	DSA-123	VOC	DFIRE	WREF	PINE SI	100	NA	NA	WESP/RTO	M25A	3	4.94E-01	4.94E-01	B	+FOR(0.0337)
RTO-controlled VOC as propane, direct wood-fired, pines												Average	3.32E-01		
												Minimum	1.71E-01		
												Maximum	4.94E-01		
59	DNB-1	VOC	DFIRE	WREF	HWOOI	100	NA	NA	WESP/RTO	M25A	3	3.59E-02	3.59E-02	A	+FOR(0.0169)
RTO-controlled VOC as propane, direct wood-fired, hardwood												Average	3.59E-02		
42	DUR-12	VOC	DFIRE	WREF	NS	NS	NS	NS	MCLO/RTO	M25A	3	1.16E-01		C	unkn. species
43	DNW-1	VOC	DFIRE	WREF	NS	NS	NS	NS	MCLO/RTO	M25A	3	6.33E-02		C	unkn. species
44	DCO-123	VOC	DFIRE	WREF	NS	NS	NS	NS	MCLO/RTO	M25A	3	2.35E-01		B	unkn. species
32	DH1-12	VOC	DFIRE	WREF	NS	NS	NS	NS	EFB/RTO	M25A	3	3.65E-01		B	unkn. species
32	DH2-12	VOC	DFIRE	WREF	NS	NS	NS	NS	MCLO/EFB/R	M25A	3	1.82E-01		B	unkn. species
29	DH1-12	VOC	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	M25A	3	1.03E-01		B	unkn. species
37	DHO-12	VOC	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	M25A	3	3.95E-02		B	unkn. species
38	DH2-12	VOC	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	M25A	3	2.71E-01		B	unkn. species

(a) NS = not specified. NA = not applicable. Lb/ODT = pounds of pollutant per oven-dried ton of wood material out of dryer.

(b) Pollutant codes are identified in Table 4-6. Factors for VOC on an as propane basis.

(c) Firing types: DFIRE = direct firing; IHEAT = indirect firing.

(d) Fuel types: WREF = wood residue; SDUST = sanderdust; FINES = unspecified fines; DFINE = unspecified dry fines;

WDUST = unspecified wood dust.

TABLE A-2. (Continued)

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- (e) Wood species: SY PINE = Southern yellow pine; HWOOD = unspecified hardwood; SPRUCE = spruce; UFIR = unspecified fir; POPLAR = poplar;
SWOOD = unspecified softwood; PINE SP = unknown pine species; ASPEN = aspen; US PINE = unspecified southern pines.
- (f) Emission control devices: CYC = cyclone; MCLO = multiclone; EFB = electrified filter bed; WESP = wet electrostatic precipitator;
RTO = regenerative thermal oxidizer.
- (g) Test method: M25 = EPA Method 25; M25A = EPA Method 25A.

TABLE A-1. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
3	DSL-2	CPM	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M202	3	1.50E-01	1.01E-01	B	
1	DSL-3	CPM	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M202	3	5.30E-02		B	
3	DSL-3	CPM	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M202	3	1.20E-01	8.65E-02	C	
1	DSL-4	CPM	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M202	3	1.00E-01		B	
3	DSL-4	CPM	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M202	3	1.30E-01	1.15E-01	B	
1	DSL-5	CPM	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M202	3	6.70E-02		B	
3	DSL-5	CPM	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M202	3	1.10E-01	8.85E-02	B	
7	DUR-1	CPM	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	8.00E-01		C	
7	DUR-1	CPM	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	7.40E-01	7.70E-01	B	
7	DUR-2	CPM	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	3.80E-01		B	
7	DUR-2	CPM	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	1.70E-01	2.75E-01	C	
MCLO-controlled CPM, direct wood-fired, pines												Average	4.09E-01		
												Minimum	5.20E-02		
												Maximum	1.40E+00		
												Std. Dev.	3.65E-01		
73	DTO-1	CPM	DFIRE	WREF	HWOOI	90	SWOOE	10	MCLO	WDNR	3	7.60E-01	7.60E-01	A	
73	DTO-2	CPM	DFIRE	WREF	HWOOI	90	SWOOE	10	MCLO	WDNR	3	2.31E-01	2.31E-01	A	
MCLO-controlled CPM, direct wood-fired, hardwood												Average	4.96E-01		
												Minimum	2.31E-01		
												Maximum	7.60E-01		
070-031992	2D070	CPM	DFIRE	NS	PINE SF	85	HWOOI	15	MCLO	G5T	3	2.79E+00		A	mixed species
070-062891	1D070	CPM	DFIRE	NS	PINE SF	85	HWOOI	15	MCLO	G5T	2	3.05E+00		B	mixed species
070-062891	3D070	CPM	DFIRE	NS	PINE SF	85	HWOOI	15	MCLO	G5T	3	1.96E+00		A	mixed species
070-101091	2D070	CPM	DFIRE	NS	PINE SF	85	HWOOI	15	MCLO	G5T	3	2.11E+00		A	mixed species
070-101091	3D070	CPM	DFIRE	NS	PINE SF	85	HWOOI	15	MCLO	G5T	3	2.92E+00		A	mixed species
070-101091	3D070	CPM	DFIRE	NS	PINE SF	85	HWOOI	15	MCLO	G5T	1	1.80E+00		D	mixed species
070-102192	3D070	CPM	DFIRE	NS	PINE SF	85	HWOOI	15	MCLO	M5/202	3	1.58E+00		A	mixed species
096-012792	2D096	CPM	DFIRE	DFINE	ASPEN	80	PINE SP	20	MCLO	M202	3	3.81E-01		A	mixed species
10	DEL-1	CPM	DFIRE	WREF	US PINI	60	HWOOI	40	MCLO	M202	3	1.50E+00		A	mixed species
32	DH2-1	CPM	DFIRE	WREF	NS	NS	NS	NS	MCLO	WDNR	3	1.10E+00		B	unkn. species
32	DH2-2	CPM	DFIRE	WREF	NS	NS	NS	NS	MCLO	WDNR	3	2.06E+00		B	unkn. species
94	DDC-1	CPM	DFIRE	WREF	NS	NS	NS	NS	MCLO	M202	3	1.26E+00		A	unkn. species

TABLE A-1. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
088-12089	1D088	CPM	DFIRE	WREF	PINE SF	100	NA	NA	EFB	M202	3	4.80E-01	4.80E-01	A	
096-06079	1D096	CPM	DFIRE	DFINE	PINE SF	100	NA	NA	EFB	M202	3	3.78E-01		A	
096-06089	1D096	CPM	DFIRE	DFINE	PINE SF	100	NA	NA	EFB	M202	3	6.01E-01	4.90E-01	A	
EFB-controlled CPM, direct wood-fired, pines												Average	4.85E-01		
												Minimum	3.78E-01		
												Maximum	6.01E-01		
083-06098	YD083	CPM	DFIRE	DFINE	ASPEN	95	PINE SP	5	EFB	M5	3	4.80E-01	4.80E-01	A	
083-06108	XD083	CPM	DFIRE	DFINE	ASPEN	95	PINE SP	5	EFB	M5	3	3.11E-01	3.11E-01	A	
096-06059	1D096	CPM	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M202	3	2.96E-01		A	
096-06059	1D096	CPM	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M202	3	1.22E-01	2.09E-01	A	
210-02119	1D210	CPM	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M202	3	3.53E-01		A	
210-02119	1D210	CPM	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M202	3	4.50E-01		A	
210-04229	1D210	CPM	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M202	3	5.02E-01		A	
210-04229	1D210	CPM	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M202	3	2.88E-01	3.98E-01	A	
EFB-controlled CPM, direct wood-fired, Aspen												Average	3.50E-01		
												Minimum	1.22E-01		
												Maximum	5.02E-01		
												Std. Dev.	1.25E-01		
083-06098	YD083	CPM	DFIRE	DFINE	ASPEN	95	PINE SP	5	EFB	M5	3	4.80E-01	4.80E-01	A	
083-06108	XD083	CPM	DFIRE	DFINE	ASPEN	95	PINE SP	5	EFB	M5	3	3.11E-01	3.11E-01	A	
096-06059	1D096	CPM	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M202	3	2.96E-01		A	
096-06059	1D096	CPM	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M202	3	1.22E-01	2.09E-01	A	
210-02119	1D210	CPM	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M202	3	3.53E-01		A	
210-02119	1D210	CPM	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M202	3	4.50E-01		A	
210-04229	1D210	CPM	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M202	3	5.02E-01		A	
210-04229	1D210	CPM	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M202	3	2.88E-01	3.98E-01	A	
225-02079	1D225	CPM	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M5	3	3.17E-01		A	
225-02079	1D225	CPM	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M5	3	3.54E-01	3.36E-01	A	
97	DDG-1	CPM	DFIRE	WREF	HWOOI	99	SWOOD	1	MCLO/EFB	M202	3	6.60E-01	6.60E-01	A	
EFB-controlled CPM, direct wood-fired, hardwood												Average	3.99E-01		
												Minimum	1.22E-01		
												Maximum	6.60E-01		
												Std. Dev.	1.41E-01		
95	DDG-1	CPM	DFIRE	WREF	HWOOI	99	SWOOD	1	MCLO/EFB	M202	3	1.89E+00		A	suspect data
212-10119	1D212	CPM	DFIRE	DFINE	HWOOI	10	SWOOD	90	EFB	M5	3	4.68E-01		A	mixed species
10	DEL-1	CPM	DFIRE	WREF	US PIN	60	HWOOI	40	MCLO/EFB	M202	3	7.50E-01		B	mixed species
98,99	DDG-1	CPM	DFIRE	WREF	NS	NS	NS	NS	MCLO/EFB	M202	3	3.05E-01		A	unkn. species

TABLE A-1. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
23,24	DSA-123	CPM	DFIRE	WREF	PINE SF	100	NA	NA	WESP	M202	3	8.34E-01	8.34E-01	A	
WESP-controlled CPM, direct wood-fired, pines												Average	8.34E-01		
54	DMO-1	CPM	DFIRE	WREF	HWOOI	90	SWOOD	10	MCLO/WESP	M202	3	2.54E-01	2.54E-01	A	
73	DTO-12	CPM	DFIRE	WREF	HWOOI	90	SWOOD	10	MCLO/WESP	WDNR	3	8.70E-02	8.70E-02	A	
59	DNB-1	CPM	DFIRE	WREF	HWOOI	100	NA	NA	WESP	M202	3	5.53E-01	5.53E-01	A	
WESP-controlled CPM, direct wood-fired, hardwood												Average	2.98E-01		
												Minimum	8.70E-02		
												Maximum	5.53E-01		
57	DMO-1	CPM	DFIRE	WREF	HWOOI	80	SWOOD	20	MCLO/WESP	M202	3	3.34E-01		A	mixed species
58	DMO-1	CPM	DFIRE	WREF	NS	NS	NS	NS	MCLO/WESP	M202	3	2.57E-01		B	unkn. species
62	DMO-1	CPM	DFIRE	WREF	ASPEN	75	PINE SP	25	MCLO/WESP	M202	3	4.65E-01		A	mixed species
70	DMO-1	CPM	DFIRE	WREF	HWOOI	80	SWOOD	20	MCLO/WESP	M202	3	2.33E-01		A	mixed species
102	DMO-1	CPM	DFIRE	WREF	NS	NS	NS	NS	MCLO/WESP	M202	3	1.94E-01		A	unkn. species
041-063092	XD041	CPM	DFIRE	WREF	SY PINI	70	HWOOI	30	WESP	OD7	3	4.10E-01		A	mixed species
041-121792	XD041	CPM	DFIRE	WREF	SY PINI	70	HWOOI	30	WESP	M5A	3	3.50E-01		A	mixed species
044-102588	XD044	CPM	DFIRE	SDUST	SPRUCL	50	UFIR	50	WESP	M5	3	1.17E-01		A	mixed species
044-102588	XD044	CPM	DFIRE	SDUST	POPLAI	39	SWOOD	61	WESP	M5	1			NR	
044-102588	XD044	CPM	DFIRE	SDUST	POPLAI	39	SWOOD	61	WESP	M5	1			NR	
069-081491	1D069	CPM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M202	3			NR	
069-081491	1D069	CPM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M202	3			NR	
069-081591	2D069	CPM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M202	3			NR	
069-081591	2D069	CPM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M202	3			NR	
069-081992	1D069	CPM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M202	3			NR	
069-081992	1D069	CPM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M202	3			NR	
069-082092	2D069	CPM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M202	3			NR	
069-082092	2D069	CPM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M202	3			NR	
069-121390	2D069	CPM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M202	3			NR	
069-121390	1D069	CPM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M202	3			NR	
069-121390	2D069	CPM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M202	3			NR	
070-031992	2D070	CPM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	3	7.53E-01		A	mixed species
070-042392	1D070	CPM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	3	2.91E-01		A	mixed species
070-042492	3D070	CPM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	3	6.57E-01		A	mixed species
070-062891	1D070	CPM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	3	7.11E-01		A	mixed species
070-062891	3D070	CPM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	3	9.38E-01		A	mixed species
070-101091	2D070	CPM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	3	1.00E+00		A	mixed species
070-101091	3D070	CPM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	3	8.00E-01		A	mixed species
070-101091	2D070	CPM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	1			NR	

TABLE A-1. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
070-101091	2D070	CPM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	1	1.70E+00		D	mixed species
070-101091	3D070	CPM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	1	1.45E+00		D	mixed species
070-102192	3D070	CPM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	M5/202	3	5.50E-01		A	mixed species
096-012793	2D096	CPM	DFIRE	DFINE	ASPEN	80	PINE SP	20	WESP	M202	3	2.85E-01		A	mixed species
215-062591	XD215	CPM	DFIRE	WREF	SY PINI	40	HWOOI	60	WESP	M202	3	3.57E-01		A	mixed species
38	DH2-12	CPM	DFIRE	WREF	NS	NS	NS	NS	WESP	WDNR	3	5.58E-01		B	unkn. species
75	DRX-1234	CPM	DFIRE	WREF	PINE SF	100	NA	NA	MCLO/RTO	M202	3	1.39E-01	1.39E-01	A	
23,24	DSA-123	CPM	DFIRE	WREF	PINE SF	100	NA	NA	WESP/RTO	M202	3	9.76E-02	9.76E-02	A	
RTO-controlled CPM, direct wood-fired, pines												Average	1.18E-01		
												Minimum	9.76E-02		
												Maximum	1.39E-01		
32	DH1-12	CPM	DFIRE	WREF	NS	NS	NS	NS	EFB/RTO	WDNR	3	3.48E-01		B	unkn. species
32	DH2-12	CPM	DFIRE	WREF	NS	NS	NS	NS	MCLO/EFB/RTI	WDNR	3	1.90E-01		B	unkn. species
42	DUR-12	CPM	DFIRE	WREF	NS	NS	NS	NS	MCLO/RTO	M5	3	1.12E-01		B	unkn. species
43	DNW-1	CPM	DFIRE	WREF	NS	NS	NS	NS	MCLO/RTO	M5	3	6.95E-02		B	unkn. species
44	DCO-123	CPM	DFIRE	WREF	NS	NS	NS	NS	MCLO/RTO	M5	3	9.69E-02		B	unkn. species
59	DNB-1	CPM	DFIRE	WREF	HWOOI	100	NA	NA	WESP/RTO	M202	3	1.24E-01	1.24E-01	A	
RTO-controlled CPM, direct wood-fired, hardwood												Average	1.24E-01		
29	DH1-12	CPM	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	WDNR	3	2.22E-02		B	unkn. species
38	DH2-12	CPM	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	WDNR	3	1.99E-02		B	unkn. species
3	DSL-1	CPM-I	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M202	3	1.40E-02		B	not reported
3	DSL-2	CPM-I	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M202	3	1.30E-02		B	not reported
3	DSL-3	CPM-I	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M202	3	2.40E-02		C	not reported
3	DSL-4	CPM-I	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M202	3	1.30E-02		B	not reported
3	DSL-5	CPM-I	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M202	3	1.60E-02		B	not reported
4	DCO-1	CPM-I	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	1.10E-01		A	not reported
4	DCO-1	CPM-I	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	1.30E-01		A	not reported
4	DCO-2	CPM-I	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	2	4.40E-01		B	not reported
4	DCO-2	CPM-I	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	2.40E-01		B	not reported
4	DCO-3	CPM-I	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	1.40E-01		A	not reported
4	DCO-3	CPM-I	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	1.40E-01		A	not reported
5	DNW-1	CPM-I	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	6.20E-01		A	not reported
5	DNW-1	CPM-I	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	3.80E-01		A	not reported
5	DNW-2	CPM-I	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	1.70E-01		A	not reported
5	DNW-2	CPM-I	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	5.30E-01		A	not reported
7	DUR-1	CPM-I	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	4.10E-01		C	not reported
7	DUR-1	CPM-I	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	4.40E-01		B	not reported

TABLE A-1. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
7	DUR-2	CPM-I	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	1.50E-01		B	not reported
7	DUR-2	CPM-I	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	5.40E-02		C	not reported
10	DEL-1	CPM-I	DFIRE	WREF	US PINI	60	HWOOI	40	MCLO/EFB	M202	3	4.50E-01		B	not reported
10	DEL-1	CPM-I	DFIRE	WREF	US PINI	60	HWOOI	40	MCLO	M202	3	8.00E-01		A	not reported
3	DSL-1	CPM-O	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M202	3	1.10E-01		B	not reported
3	DSL-2	CPM-O	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M202	3	1.40E-01		B	not reported
3	DSL-3	CPM-O	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M202	3	9.40E-02		C	not reported
3	DSL-4	CPM-O	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M202	3	1.20E-01		B	not reported
3	DSL-5	CPM-O	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M202	3	9.80E-02		B	not reported
4	DCO-1	CPM-O	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	5.90E-01		A	not reported
4	DCO-1	CPM-O	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	2.00E-01		A	not reported
4	DCO-2	CPM-O	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	2	1.00E+00		B	not reported
4	DCO-2	CPM-O	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	3.70E-01		B	not reported
4	DCO-3	CPM-O	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	4.00E-01		A	not reported
4	DCO-3	CPM-O	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	1.30E-01		A	not reported
5	DNW-1	CPM-O	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	4.10E-01		A	not reported
5	DNW-1	CPM-O	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	2.90E-01		A	not reported
5	DNW-2	CPM-O	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	1.60E-01		A	not reported
5	DNW-2	CPM-O	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	3.30E-01		A	not reported
7	DUR-1	CPM-O	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	3.90E-01		C	not reported
7	DUR-1	CPM-O	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	3.10E-01		B	not reported
7	DUR-2	CPM-O	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	2.30E-01		B	not reported
7	DUR-2	CPM-O	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M202	3	1.20E-01		C	not reported
10	DEL-1	CPM-O	DFIRE	WREF	US PINI	60	HWOOI	40	MCLO/EFB	M202	3	3.00E-01		B	not reported
10	DEL-1	CPM-O	DFIRE	WREF	US PINI	60	HWOOI	40	MCLO	M202	3	6.70E-01		A	not reported
11	DDD-1	CPM-O	DFIRE	SDUST	US PINI	NS	HWOOI	NS	WESP	M5	3	6.70E-02		B	not reported
11	DDD-1	CPM-O	DFIRE	SDUST	US PINI	NS	HWOOI	NS	CYC	M5	3	2.80E+00		B	not reported
23,24	DSA-1	PM	DFIRE	WREF	PINE SF	100	NA	NA	CYC	M5	3	4.15E+00	4.15E+00	A	
23,24	DSA-2	PM	DFIRE	WREF	PINE SF	100	NA	NA	CYC	M5	3	3.76E+00	3.76E+00	A	
23,24	DSA-3	PM	DFIRE	WREF	PINE SF	100	NA	NA	CYC	M5	3	3.89E+00	3.89E+00	A	
Uncontrolled PM, direct wood-fired, pines												Average	3.93E+00		
												Minimum	3.76E+00		
												Maximum	4.15E+00		
59	DNB-1	PM	DFIRE	WREF	HWOOI	100	NA	NA	CYC	M5	3	6.03E+00	6.03E+00	A	
Uncontrolled PM, direct wood-fired, hardwood NOT REPORTED IN AP-42; INCONSISTENT WITH OTHER DATA												Average	6.03E+00		

TABLE A-1. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
041-052192	XD041	PM	DFIRE	WREF	SY PINI	60	HWOOI	40	CYC	M5	3	5.07E+00		A	mixed species
041-063092	XD041	PM	DFIRE	WREF	SY PINI	70	HWOOI	30	CYC	OD7	3	6.58E+00		A	mixed species
041-121792	XD041	PM	DFIRE	WREF	SY PINI	70	HWOOI	30	CYC	M5	3	4.64E+00		A	mixed species
044-102588	XD044	PM	DFIRE	SDUST	SPRUCI	50	UFIR	50	CYC	M5	3	3.15E+00		A	mixed species
052-011492	XD052	PM	IHEAT	WREF	HWOOI	50	SY PINI	50	CYC	M5	3	4.53E+00		A	mixed species
215-042088	XD215	PM	DFIRE	WREF	HWOOI	45	PINE SP	55	CYC	M5	3	4.36E+00		A	mixed species
215-062591	XD215	PM	DFIRE	WREF	SY PINI	40	HWOOI	60	CYC	M5	3	9.37E-02		A	mixed species
215-062591	YD215	PM	DFIRE	WREF	SY PINI	40	HWOOI	60	CYC	OD7	1	2.20E-01		D	1-run data
215-062591	YD215	PM	DFIRE	WREF	SY PINI	40	HWOOI	60	CYC	OD7	1	4.33E-01		D	1-run data
11	DDD-1	PM	DFIRE	SDUST	US PINI	NS	HWOOI	NS	CYC	M5	3	3.90E+00		B	mixed species
30	DCH-1	PM	DFIRE	WREF	NS	NS	NS	NS	CYC	M5	3	1.18E-01		B	unkn. species
32	DH1-1	PM	DFIRE	WREF	NS	NS	NS	NS	CYC	M5	3	3.31E+00		B	unkn. species
32	DH1-2	PM	DFIRE	WREF	NS	NS	NS	NS	CYC	M5	3	3.19E+00		B	unkn. species
42	DUR-1	PM	DFIRE	WREF	NS	NS	NS	NS	CYC	M5	3	4.51E+00		B	unkn. species
42	DUR-2	PM	DFIRE	WREF	NS	NS	NS	NS	CYC	M5	3	5.98E+00		C	unkn. species
43	DNW-1	PM	DFIRE	WREF	NS	NS	NS	NS	CYC	M5	3	3.28E+00		B	unkn. species
44	DCO-1	PM	DFIRE	WREF	NS	NS	NS	NS	CYC	M5	3	4.37E+00		B	unkn. species
44	DCO-2	PM	DFIRE	WREF	NS	NS	NS	NS	CYC	M5	3	4.98E+00		B	unkn. species
44	DCO-3	PM	DFIRE	WREF	NS	NS	NS	NS	CYC	M5	3	4.47E+00		B	unkn. species
3	DSL-1	PM	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M5	3	2.20E+00	2.20E+00	B	
3	DSL-2	PM	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M5	3	1.90E+00	1.90E+00	B	
3	DSL-3	PM	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M5	3	1.60E+00	1.60E+00	C	
3	DSL-4	PM	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M5	3	1.50E+00	1.50E+00	B	
3	DSL-5	PM	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M5	3	1.90E+00	1.90E+00	B	
4	DCO-1	PM	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M5	3	2.10E+00	2.10E+00	A	
4	DCO-2	PM	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M5	2	2.20E+00	2.20E+00	B	
4	DCO-3	PM	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M5	3	1.30E+00	1.30E+00	A	
5	DNW-1	PM	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M5	3	3.00E+00	3.00E+00	A	
5	DNW-2	PM	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M5	3	2.60E+00	2.60E+00	A	
7	DUR-1	PM	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M5	3	2.20E+00	2.20E+00	C	
7	DUR-2	PM	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M5	3	2.40E+00	2.40E+00	B	
MCLO-controlled PM, direct wood-fired, pines												Average	2.08E+00		
												Minimum	1.30E+00		
												Maximum	3.00E+00		
												Std. Dev.	4.77E-01		

TABLE A-1. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
097-06168	1D097	PM	DFIRE	DFINE	HWOOI	100	NA	NA	MCLO	M5	3	3.01E+00		A	
097-09128	1D097	PM	DFIRE	DFINE	HWOOI	100	NA	NA	MCLO	M5	3	2.81E+00	2.91E+00	A	
097-06158	2D097	PM	DFIRE	DFINE	HWOOI	100	NA	NA	MCLO	M5	3	8.36E+00		A	
097-09118	2D097	PM	DFIRE	DFINE	HWOOI	100	NA	NA	MCLO	M5	3	8.69E+00	8.53E+00	A	
73	DTO-1	PM	DFIRE	WREF	HWOOI	90	SWOOD	10	MCLO	M5	3	5.49E+00	5.49E+00	A	
73	DTO-2	PM	DFIRE	WREF	HWOOI	90	SWOOD	10	MCLO	M5	3	1.06E+01	1.06E+01	A	
MCLO-controlled PM, direct wood-fired, hardwood												Average	6.88E+00		
												Minimum	2.81E+00		
												Maximum	1.06E+01		
												Std. Dev.	3.22E+00		
32	DH1-12	PM	DFIRE	WREF	NS	NS	NS	NS	EFB/RTO	M5	3	5.38E-01		B	unkn. species
20	DEL-1	PM	DFIRE	WREF	US PINI	60	HWOOI	40	IWS	M5	3	1.50E+00		D	mixed species
21	DEL-1	PM	DFIRE	WREF	US PINI	60	HWOOI	40	IWS	M5	3	1.30E+00		B	mixed species
070-03199	2D070	PM	DFIRE	NS	PINE SF	85	HWOOI	15	MCLO	G5T	3	2.56E+00		A	mixed species
070-06289	1D070	PM	DFIRE	NS	PINE SF	85	HWOOI	15	MCLO	G5T	3	2.35E+00		A	mixed species
070-06289	3D070	PM	DFIRE	NS	PINE SF	85	HWOOI	15	MCLO	G5T	3	3.97E+00		A	mixed species
070-10109	2D070	PM	DFIRE	NS	PINE SF	85	HWOOI	15	MCLO	G5T	3	4.12E+00		A	mixed species
070-10109	3D070	PM	DFIRE	NS	PINE SF	85	HWOOI	15	MCLO	G5T	3	1.55E+00		A	mixed species
070-10109	3D070	PM	DFIRE	NS	PINE SF	85	HWOOI	15	MCLO	G5T	1	1.40E+00		D	1-run data
070-10219	3D070	PM	DFIRE	NS	PINE SF	85	HWOOI	15	MCLO	M5	3	3.87E+00		A	mixed species
096-01279	2D096	PM	DFIRE	DFINE	ASPEN	80	PINE SP	20	MCLO	M5	3	2.50E+00		A	mixed species
10	DEL-1	PM	DFIRE	WREF	US PINI	60	HWOOI	40	MCLO	M5	3	3.30E+00		A	mixed species
32	DH2-1	PM	DFIRE	WREF	NS	NS	NS	NS	MCLO	M5	3	3.34E+00		B	unkn. species
32	DH2-2	PM	DFIRE	WREF	NS	NS	NS	NS	MCLO	M5	3	3.34E+00		B	unkn. species
94	DDC-1	PM	DFIRE	WREF	NS	NS	NS	NS	MCLO	M5	3	2.98E+00		A	unkn. species
088-12089	1D088	PM	DFIRE	WREF	PINE SF	100	NA	NA	EFB	M5	3	7.57E-01	7.57E-01	A	
096-06079	1D096	PM	DFIRE	DFINE	PINE SF	100	NA	NA	EFB	M5	3	4.40E-01		A	
096-06089	1D096	PM	DFIRE	DFINE	PINE SF	100	NA	NA	EFB	M5	3	4.89E-01	4.64E-01	A	
EFB-controlled PM, direct wood-fired, pines												Average	6.11E-01		
												Minimum	4.40E-01		
												Maximum	7.57E-01		
212-10119	1D212	PM	DFIRE	DFINE	HWOOI	10	SWOOD	90	EFB	M5	3	4.69E-01		A	mixed species
096-06059	1D096	PM	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M5	3	8.96E-01		A	
096-06059	1D096	PM	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M5	3	7.45E-01	8.21E-01	A	
210-02119	1D210	PM	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M5	3	2.97E+00		A	

TABLE A-1. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
210-042292	1D210	PM	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M5	3	1.29E+00	2.13E+00	A	
083-060986	YD083	PM	DFIRE	DFINE	ASPEN	95	PINE SP	5	EFB	M5	3	6.56E-01	6.56E-01	A	
083-061086	XD083	PM	DFIRE	DFINE	ASPEN	95	PINE SP	5	EFB	M5	3	7.16E-01	7.16E-01	A	
EFB-controlled PM, direct wood-fired, Aspen												Average	1.08E+00		
												Minimum	6.56E-01		
												Maximum	2.97E+00		
												Std. Dev.	8.91E-01		
088-121486	1D088	PM	DFIRE	WREF	HWOOI	95	SWOOD	5	EFB	M5	3	7.51E-01	7.51E-01	A	
096-060590	1D096	PM	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M5	3	8.96E-01		A	
096-060590	1D096	PM	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M5	3	7.45E-01	8.21E-01	A	
210-021192	1D210	PM	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M5	3	2.97E+00		A	
210-042292	1D210	PM	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M5	3	1.29E+00	2.13E+00	A	
211-041191	1D211	PM	DFIRE	WREF	HWOOI	100	NA	NA	EFB	M5	3	6.36E-01	6.36E-01	A	
225-020792	1D225	PM	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M5	3	1.03E+00	1.03E+00	A	
95	DDG-1	PM	DFIRE	WREF	HWOOI	99	SWOOD	1	MCLO/EFB	M5	3	7.79E-01		A	
97	DDG-1	PM	DFIRE	WREF	HWOOI	99	SWOOD	1	MCLO/EFB	M5	3	6.28E-01	7.04E-01	A	
083-061086	XD083	PM	DFIRE	DFINE	ASPEN	95	PINE SP	5	EFB	M5	3	7.16E-01	7.16E-01	A	
097-061490	XD097	PM	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M5	3	6.08E-01		A	
097-080290	XD097	PM	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M5	3	8.41E-01		A	
097-100590	XD097	PM	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M5	3	6.47E-01		A	
097-122086	XD097	PM	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M5	3	1.20E+00	8.25E-01	A	
083-060986	YD083	PM	DFIRE	DFINE	ASPEN	95	PINE SP	5	EFB	M5	3	6.56E-01	6.56E-01	A	
EFB-controlled PM, direct wood-fired, hardwood												Average	9.18E-01		
												Minimum	6.08E-01		
												Maximum	2.97E+00		
												Std. Dev.	5.94E-01		
10	DEL-1	PM	DFIRE	WREF	US PINE	60	HWOOI	40	MCLO/EFB	M5	3	4.20E-01		B	mixed species
98,99	DDG-1	PM	DFIRE	WREF	NS	NS	NS	NS	MCLO/EFB	M5	3	1.11E+00		A	unkn. species
23,24	DSA-123	PM	DFIRE	WREF	PINE SF	100	NA	NA	WESP	M5	3	2.02E-01	2.02E-01	A	
WESP-controlled PM, direct wood-fired, pines												Average	2.02E-01		
54	DMO-1	PM	DFIRE	WREF	HWOOI	90	SWOOD	10	MCLO/WESP	M5	3	1.02E-01	1.02E-01	A	
73	DTO-12	PM	DFIRE	WREF	HWOOI	90	SWOOD	10	MCLO/WESP	M5	3	2.44E-01	2.44E-01	A	
59	DNB-1	PM	DFIRE	WREF	HWOOI	100	NA	NA	WESP	M5	3	2.63E-01	2.63E-01	A	
WESP-controlled PM, direct wood-fired, hardwood												Average	2.03E-01		
												Minimum	1.02E-01		
												Maximum	2.63E-01		

TABLE A-1. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
57	DMO-1	PM	DFIRE	WREF	HWOOI	80	SWOOD	20	MCLO/WESP	M5	3	2.49E-01		A	mixed species
58	DMO-1	PM	DFIRE	WREF	NS	NS	NS	NS	MCLO/WESP	M5	3	3.33E-01		B	unkn. species
62	DMO-1	PM	DFIRE	WREF	ASPEN	75	PINE SP	25	MCLO/WESP	M5	3	1.08E-01		A	mixed species
70	DMO-1	PM	DFIRE	WREF	HWOOI	80	SWOOD	20	MCLO/WESP	M5	3	4.42E-01		A	mixed species
102	DMO-1	PM	DFIRE	WREF	NS	NS	NS	NS	MCLO/WESP	M5	3	5.63E-02		A	unkn. species
041-052192	XD041	PM	DFIRE	WREF	SY PINI	60	HWOOI	40	WESP	M5	3	1.44E+00		A	mixed species
041-063092	XD041	PM	DFIRE	WREF	SY PINI	70	HWOOI	30	WESP	OD7	3	1.76E+00		A	mixed species
041-121792	XD041	PM	DFIRE	WREF	SY PINI	70	HWOOI	30	WESP	M5	3	7.41E-01		A	mixed species
044-102588	XD044	PM	DFIRE	SDUST	SPRUCI	50	UFIR	50	WESP	M5	3	1.91E-01		A	mixed species
044-102588	XD044	PM	DFIRE	SDUST	POPLAI	39	SWOOD	61	WESP	M5	1			NR	
044-102588	XD044	PM	DFIRE	SDUST	POPLAI	39	SWOOD	61	WESP	M5	1			NR	
044-102588	XD044	PM	DFIRE	SDUST	POPLAI	39	SWOOD	61	WESP	M5	1			NR	
052-011492	XD052	PM	IHEAT	WREF	HWOOI	50	SY PINE	50	WESP	M5	3	6.16E-01		A	mixed species
069-081491	1D069	PM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M5	3			NR	
069-081491	1D069	PM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M5	3			NR	
069-081591	2D069	PM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M5	2			NR	
069-081591	2D069	PM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M5	3			NR	
069-081992	1D069	PM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M5	3			NR	
069-081992	1D069	PM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M5	3			NR	
069-082092	2D069	PM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M5	3			NR	
069-082092	2D069	PM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M5	3			NR	
069-121390	2D069	PM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M5	3			NR	
069-121390	1D069	PM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M5	3			NR	
069-121390	2D069	PM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M5	3			NR	
070-031992	2D070	PM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	3	4.73E-01		A	mixed species
070-042392	1D070	PM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	4	3.23E-01		D	mixed species
070-042492	3D070	PM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	3	5.69E-01		A	mixed species
070-062891	1D070	PM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	3	2.65E-01		A	mixed species
070-062891	3D070	PM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	3	3.37E-01		A	mixed species
070-101091	2D070	PM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	3	8.90E-01		A	mixed species
070-101091	3D070	PM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	3	3.53E-01		A	mixed species
070-101091	2D070	PM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	1			NR	
070-101091	2D070	PM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	1	8.60E-01		D	1-run data
070-101091	3D070	PM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	1	4.00E-01		D	1-run data
070-102192	3D070	PM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	M5	3	5.96E-01		A	mixed species
096-012792	2D096	PM	DFIRE	DFINE	ASPEN	80	PINE SP	20	WESP	M5	3	2.10E-01		A	mixed species

TABLE A-1. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
215-04208	XD215	PM	DFIRE	WREF	HWOOI	45	PINE SP	55	WESP	M5	3	3.37E-01		A	mixed species
215-06259	XD215	PM	DFIRE	WREF	SY PINI	40	HWOOI	60	WESP	M5	3	8.33E-03		A	mixed species
11	DDD-1	PM	DFIRE	SDUST	US PINI	NS	HWOOI	NS	WESP	M5	3	3.60E-01		B	mixed species
38	DH2-12	PM	DFIRE	WREF	NS	NS	NS	NS	WESP	M5	3	3.21E-01		B	unkn. species
75	DRX-1234	PM	DFIRE	WREF	PINE SF	100	NA	NA	MCLO/RTO	M5	3	2.84E-01	2.84E-01	A	
23,24	DSA-123	PM	DFIRE	WREF	PINE SF	100	NA	NA	WESP/RTO	M5	3	5.10E-02	5.10E-02	A	
RTO-controlled PM, direct wood-fired, pines												Average	1.68E-01		
												Minimum	5.10E-02		
												Maximum	2.84E-01		
59	DNB-1	PM	DFIRE	WREF	HWOOI	100	NA	NA	WESP/RTO	M5	3	3.64E-02	3.64E-02	A	
RTO-controlled PM, direct wood-fired, hardwood												Average	3.64E-02		
32	DH2-12	PM	DFIRE	WREF	NS	NS	NS	NS	MCLO/EFB/RTO	M5	3	4.82E-01		B	unkn. species
42	DUR-12	PM	DFIRE	WREF	NS	NS	NS	NS	MCLO/RTO	M5	3	3.48E-01		B	unkn. species
43	DNW-1	PM	DFIRE	WREF	NS	NS	NS	NS	MCLO/RTO	M5	3	1.96E-01		B	unkn. species
44	DCO-123	PM	DFIRE	WREF	NS	NS	NS	NS	MCLO/RTO	M5	3	3.55E-01		B	unkn. species
29	DH1-12	PM	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	M5	3	7.69E-02		B	unkn. species
37	DHO-12	PM	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	M5	3	1.33E-03		C	unkn. species
38	DH2-12	PM	DFIRE	WREF	NS	NS	NS	NS	WESP/RTO	M5	3	3.51E-02		B	unkn. species
041-06309	XD041	PM&CPM	DFIRE	WREF	SY PINI	70	HWOOI	30	CYC	OD7	3	7.55E+00		A	not reported
041-06309	XD041	PM&CPM	DFIRE	WREF	SY PINI	70	HWOOI	30	WESP	OD7	3	2.32E+00		A	not reported
041-12179	XD041	PM&CPM	DFIRE	WREF	SY PINI	70	HWOOI	30	WESP	M5	3	1.07E+00		A	not reported
041-12179	XD041	PM&CPM	DFIRE	WREF	SY PINI	70	HWOOI	30	CYC	M5	3	5.06E+00		A	not reported
044-10258	XD044	PM&CPM	DFIRE	SDUST	SPRUCI	50	UFIR	50	CYC	M5	3	7.57E+00		A	not reported
044-10258	XD044	PM&CPM	DFIRE	SDUST	SPRUCI	50	UFIR	50	WESP	M5	3	3.41E-01		A	not reported
044-10258	XD044	PM&CPM	DFIRE	SDUST	POPLAI	39	SWOOD	61	WESP	M5	1			NR	
044-10258	XD044	PM&CPM	DFIRE	SDUST	POPLAI	39	SWOOD	61	WESP	M5	1			NR	
069-08149	1D069	PM&CPM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M5/202	3			NR	
069-08149	1D069	PM&CPM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M5/202	3			NR	
069-08159	2D069	PM&CPM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M5/202	3			NR	
069-08159	2D069	PM&CPM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M5/202	3			NR	
069-08192	1D069	PM&CPM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M5/202	3			NR	
069-08192	1D069	PM&CPM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M5/202	3			NR	
069-08209	2D069	PM&CPM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M5/202	3			NR	
069-08209	2D069	PM&CPM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M5/202	3			NR	
069-12139	2D069	PM&CPM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M5/202	3			NR	
069-12139	1D069	PM&CPM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M5/202	3			NR	
069-12139	2D069	PM&CPM	DFIRE	FINES	POPLAI	100	NA	NA	WESP	M5/202	3			NR	

TABLE A-1. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
070-031992	2D070	PM&CPM	DFIRE	NS	PINE SF	85	HWOOI	15	MCLO	G5T	3	5.34E+00		A	not reported
070-031992	2D070	PM&CPM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	3	1.23E+00		A	not reported
070-042392	1D070	PM&CPM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	4	6.14E-01		D	not reported
070-042492	3D070	PM&CPM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	3	1.23E+00		A	not reported
070-062891	1D070	PM&CPM	DFIRE	NS	PINE SF	85	HWOOI	15	MCLO	G5T	3	5.40E+00		A	not reported
070-062891	1D070	PM&CPM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	3	9.76E-01		A	not reported
070-062891	3D070	PM&CPM	DFIRE	NS	PINE SF	85	HWOOI	15	MCLO	G5T	3	5.94E+00		A	not reported
070-062891	3D070	PM&CPM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	3	1.27E+00		A	not reported
070-101091	2D070	PM&CPM	DFIRE	NS	PINE SF	85	HWOOI	15	MCLO	G5T	3	6.23E+00		A	not reported
070-101091	2D070	PM&CPM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	3	1.89E+00		A	not reported
070-101091	3D070	PM&CPM	DFIRE	NS	PINE SF	85	HWOOI	15	MCLO	G5T	3	4.46E+00		A	not reported
070-101091	3D070	PM&CPM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	3	1.15E+00		A	not reported
070-101091	2D070	PM&CPM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	1			NR	
070-101091	2D070	PM&CPM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	1	2.57E+00		D	not reported
070-101091	3D070	PM&CPM	DFIRE	NS	PINE SF	85	HWOOI	15	MCLO	G5T	1	3.20E+00		D	not reported
070-101091	3D070	PM&CPM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	G5T	1	1.85E+00		D	not reported
070-102192	3D070	PM&CPM	DFIRE	NS	PINE SF	85	HWOOI	15	MCLO	M5/202	3	5.45E+00		A	not reported
070-102192	3D070	PM&CPM	DFIRE	NS	PINE SF	85	HWOOI	15	WESP	M5/202	3	1.15E+00		A	not reported
083-060988	YD083	PM&CPM	DFIRE	DFINE	ASPEN	95	PINE SP	5	EFB	M5	3	1.14E+00		A	not reported
083-061088	XD083	PM&CPM	DFIRE	DFINE	ASPEN	95	PINE SP	5	EFB	M5	3	1.02E+00		A	not reported
088-120892	1D088	PM&CPM	DFIRE	WREF	PINE SF	100	NA	NA	EFB	M5/202	3	1.24E+00		A	not reported
096-012792	2D096	PM&CPM	DFIRE	DFINE	ASPEN	80	PINE SP	20	WESP	M5/202	3	4.96E-01		A	not reported
096-012792	2D096	PM&CPM	DFIRE	DFINE	ASPEN	80	PINE SP	20	MCLO	M5/202	3	2.88E+00		A	not reported
096-060590	1D096	PM&CPM	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M5/202	3	1.19E+00		A	not reported
096-060590	1D096	PM&CPM	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M5/202	3	8.67E-01		A	not reported
096-060790	1D096	PM&CPM	DFIRE	DFINE	PINE SF	100	NA	NA	EFB	M5/202	3	8.18E-01		A	not reported
096-060890	1D096	PM&CPM	DFIRE	DFINE	PINE SF	100	NA	NA	EFB	M5/202	3	1.09E+00		A	not reported
127-062591	1D127	PM&CPM	DFIRE	WDUS1	ASPEN	95	PINE SP	5	EFB	M5	3	1.79E+00		A	not reported
127-082190	1D127	PM&CPM	DFIRE	WDUS1	ASPEN	95	PINE SP	5	EFB	M5	3	2.14E+00		A	not reported
210-021192	1D210	PM&CPM	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M5/202	3	3.32E+00		A	not reported
210-042292	1D210	PM&CPM	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M5/202	3	1.79E+00		A	not reported
211-012892	3D211	PM&CPM	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M5	3	8.94E-01		A	not reported
211-012992	1D211	PM&CPM	DFIRE	WREF	HWOOI	100	NA	NA	EFB	M5	3	6.02E-01		A	not reported
211-013092	2D211	PM&CPM	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M5	3	7.37E-01		A	not reported
212-101191	1D212	PM&CPM	DFIRE	DFINE	HWOOI	10	SWOOD	90	EFB	M5	3	9.38E-01		A	not reported
215-062591	XD215	PM&CPM	DFIRE	WREF	SY PINI	40	HWOOI	60	CYC	M5/202	3	4.60E+00		A	not reported

TABLE A-1. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
215-062591	XD215	PM&CPM	DFIRE	WREF	SY PINI	40	HWOOI	60	WESP	M5/202	3	6.83E-01		A	not reported
215-062591	YD215	PM&CPM	DFIRE	WREF	SY PINI	40	HWOOI	60	CYC	OD7	2	3.74E+00		B	not reported
215-062591	YD215	PM&CPM	DFIRE	WREF	SY PINI	40	HWOOI	60	CYC	OD7	2	3.22E+00		B	not reported
225-020792	1D225	PM&CPM	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M5	3	1.35E+00		A	not reported
1	DSL-1	PM10	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M201A	3	2.30E+00	2.30E+00	C	
1	DSL-2	PM10	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M201A	3	2.10E+00	2.10E+00	C	
1	DSL-3	PM10	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M201A	3	1.90E+00	1.90E+00	B	
1	DSL-4	PM10	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M201A	3	2.40E+00	2.40E+00	B	
1	DSL-5	PM10	DFIRE	WREF	SY PINI	100	NA	NA	MCLO	M201A	3	2.40E+00	2.40E+00	B	
4	DCO-1	PM10	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M201A	3	2.80E+00	2.80E+00	A	
4	DCO-2	PM10	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M201A	3	2.70E+00	2.70E+00	B	
4	DCO-3	PM10	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M201A	3	2.30E+00	2.30E+00	A	
5	DNW-1	PM10	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M201A	3	3.00E+00	3.00E+00	A	
5	DNW-2	PM10	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M201A	3	2.90E+00	2.90E+00	A	
7	DUR-1	PM10	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M201A	3	2.20E+00	2.20E+00	B	
7	DUR-2	PM10	DFIRE	WREF	US PINI	100	NA	NA	MCLO	M201A	3	2.50E+00	2.50E+00	C	
Multiclone-controlled PM-10, direct wood-fired, pines												Average	2.46E+00		
												Minimum	1.90E+00		
												Maximum	3.00E+00		
												Std. Dev.	3.34E-01		
210-021192	1D210	PM10	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M201A	3	1.82E+00		A	
210-042292	1D210	PM10	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M201A	3	5.51E-01	1.19E+00	A	
EFB-controlled PM-10, direct wood-fired, Aspen												Average	1.19E+00		
												Minimum	5.51E-01		
												Maximum	1.82E+00		
210-021192	1D210	PM10	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M201A	3	1.82E+00		A	
210-042292	1D210	PM10	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M201A	3	5.51E-01	1.19E+00	A	
225-020792	1D225	PM10	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M201A	3	8.21E-01	8.21E-01	A	
EFB-controlled PM-10, direct wood-fired, hardwood												Average	1.00E+00		
												Minimum	5.51E-01		
												Maximum	1.82E+00		
210-021192	1D210	PM10&CPM	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M201A/20	3	2.27E+00		A	not reported
210-042292	1D210	PM10&CPM	DFIRE	DFINE	ASPEN	100	NA	NA	EFB	M201A/20	3	8.39E-01		A	not reported
211-012892	3D211	PM10&CPM	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M201A	3	1.36E+00		A	not reported

TABLE A-1. (Continued)

Test Code	Unit code	Pollutant(b)	Firing type(c)	Fuel type(d)	Wood species(e)				Emission control device(f)	Test method(g)	No. of runs	Emission factor, Lb/ODT		Data rating	Comments
					Primary	%	Second.	%				Test	Dryer		
211-012992	1D211	PM10&CPM	DFIRE	WREF	HWOOI	100	NA	NA	EFB	M201A	3	9.56E-01		A	not reported
211-013092	2D211	PM10&CPM	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M201A	3	7.00E-01		A	not reported
225-020792	1D225	PM10&CPM	DFIRE	DFINE	HWOOI	100	NA	NA	EFB	M201A	3	1.18E+00		A	not reported

(a) NS = not specified. NA = not applicable. NR = not rated. Lb/ODT = pounds of pollutant per oven-dried ton of wood material out of dryer.

(b) Pollutant codes are identified in Table 4-6.

(c) Firing types: DFIRE = direct firing; IHEAT = indirect firing.

(d) Fuel types: WREF = wood residue; SDUST = sanderdust; FINES = unspecified fines; DFINE = unspecified dry fines.

(e) Wood species: SY PINE = Southern yellow pine; HWOOD = unspecified hardwood; SPRUCE = spruce; UFIR = unspecified fir; POPLAR = poplar; SWOOD = unspecified softwood; PINE SP = unknown pine species; ASPEN = aspen; US PINE = unspecified southern pines.

(f) Emission control devices: CYC = cyclone; MCLO = multiclone; EFB = electrified filter bed; WESP = wet electrostatic precipitator. RTO = regenerative thermal oxidizer; IWS = ionizing wet scrubber.

(g) Test method: M202 = EPA Method 202; OD7 = ODEQ7; M5 = EPA Method 5; M5A = EPA Method 5A; WDNR = Wisconsin Department of Natural Resources method; G5T = Georgia 5T; M201A = EPA Method 201A.