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SECTOR POLICIES AND PROGRAMS DIVISION  
OFFICE OF AIR QUALITY PLANNING AND STANDARDS  
OFFICE OF AIR AND RADIATION

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SUBJECT: Development of a Provisional Emissions Calculations Tool for Inclusion in the Final PCWP ICR

FROM: EPA/OAR/OAQPS/SPPD/NRG

TO: EPA-HQ-OAR-2016-0243

## **I. Introduction**

The U.S. EPA is required under Clean Air Act sections 112(f)(2) and 112(d)(6) to perform a residual risk and technology review (RTR) of the Plywood and Composite Wood Products (PCWP) National Emission Standards for Hazardous Air Pollutants (NESHAP) codified in 40 CFR part 63, subpart DDDD. In order to conduct the data analyses required for the RTR, the EPA is conducting an Information Collection Request (ICR) to gather information from the PCWP industry. As part of the ICR, facilities are asked to compile a HAP emissions inventory that will be used in the EPA's residual risk modeling. The EPA will review the file for quality assurance (QA) and standardization. The EPA has included a Provisional Calculation Tool within the PCWP ICR spreadsheet in order to address stakeholder concerns regarding the level of effort (burden) required to develop the HAP emissions inventory as part of the ICR response. Some stakeholders have indicated that many facilities do not maintain HAP emissions inventories, and therefore, considerable effort will be required to develop the inventory required for the ICR. The goal of the developing the provisional calculations is to reduce respondent burden.

Instructions for use of the Provisional Calculation Tool are provided in the ICR instruction document accompanying the draft ICR spreadsheet (PCWP\_survey.xlsx). The provisional calculations are built into the *HAP Emissions* tab of the ICR spreadsheet. Because use of the provisional calculations is optional, the columns and instructions pertaining to the Provisional Calculation Tool can be ignored by facilities not using the tool.

The purpose of this memorandum is to document the emission factors used in the Provisional Calculation Tool. Section II provides an overview of the PCWP Source Classification Codes (SCCs) and discusses the selection of emission factors for organic and metal HAP. Appendices to this memorandum list the SCCs and pollutants with emission factors included in the Provisional Calculation Tool.

## II. Selection of Emission Factors

### A. Source Classification Codes and Process Unit Types

The U.S. EPA uses SCCs to classify different types of activities that generate emissions. Each SCC represents a unique source category-specific process or function that emits air pollutants. The SCCs are used as a primary identifying data element in EPA's emission factor references (such as AP-42), the National Emissions Inventory (NEI), and other EPA databases. The SCCs are also used by many regional, state, local and tribal agency emissions data systems.

The list of SCCs applicable to the PCWP industry was updated in 2015, expanding the list to describe the relevant PCWP processes and to assign each process an SCC. A few additional revisions were made in 2016, and the lumber kiln SCCs were updated in 2017. The additional SCCs were added to assist various stakeholders in creation of emissions inventories for PCWP facilities. At present, there are 425 SCCs applicable to the PCWP industry. Many of the new SCCs do not yet appear in the most recent version (2014) version of the NEI.

In general, SCCs use a hierarchical system in which the classification of the emissions process becomes increasingly more specific with each of the four levels. The first level of description provides the most general information about the emissions process. The fourth level is the most detailed and describes specifics about emissions process. Over time the evolution of emissions activity and regulations where SCCs were needed, as well as other factors, have led to a concurrent evolution of the SCCs structure. Some SCCs have been retired, others have been created, and others have been modified or converted. Some SCCs may be extremely detailed in their representation of a process while others may not be as detailed. SCCs are not specific to a pollutant. Consequently, an SCC can describe a process that emits more than one pollutant.<sup>1</sup> Table 1 provides the SCC levels for the PCWP manufacturing industry.

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<sup>1</sup>Introduction to Source Classification Codes and their Use for EIS Submissions, <https://ofmpub.epa.gov/scsearch/docs/SCC-IntroToSCCs.pdf>

**Table 1. SCC Levels for the PCWP Manufacturing Process Units**

SCC Level	Description
Level 1	Industrial Processes
Level 2	Pulp and Paper and Wood Products
Level 3	<ul style="list-style-type: none"> <li>• Plywood Operations</li> <li>• Particleboard Manufacture</li> <li>• Medium Density Fiberboard (MDF) Manufacture</li> <li>• Oriented Strandboard (OSB) Manufacture</li> <li>• Hardboard (HB) Manufacture</li> <li>• Fiberboard (FB) Manufacture</li> <li>• Glulam Manufacture</li> <li>• I-Joist Manufacture</li> <li>• Laminated Veneer Lumber (LVL) Manufacture</li> <li>• Laminated Strand Lumber (LSL) Manufacture</li> <li>• Parallel Strand Lumber (PSL) Manufacture</li> <li>• Sawmill Operations</li> </ul>
Level 4	<i>Example:</i> Hardwood Veneer Dryer: Direct Natural Gas-fired: Cooling Section

Most of the PCWP SCCs are clearly or potentially applicable to PCWP process units covered under the ICR. Sixty (60) SCCs that are not applicable to the PCWP NESHAP source category were removed from the SCC list for the ICR, including:

- SCCs for “green-end” wood material handling sources not expected to emit HAP, but have SCCs because they are PM sources; and
- SCCs for lumber processing sources other than lumber kilns which are outside of the PCWP source category.

**Appendix A** lists the specific SCCs that were removed from the PCWP ICR.

Each facility responding to the ICR must select the applicable SCCs for their PCWP manufacturing operations. Stationary combustion sources (such as boilers) are not required to be included in the PCWP ICR unless the combustion unit provides direct heat to a dryer such that the combustion unit and dryer exhaust are comingled. To facilitate selection of appropriate SCCs for the PCWP ICR, the PCWP product types (coinciding with SCC Level 3) and the process unit types required to be included in the PCWP ICR were mapped to the SCCs. Occasionally, multiple SCCs apply for the same process unit (e.g., there are different SCCs for veneer dryer heated zones and cooling sections). An “other” process unit type was associated with SCCs that are generic in nature or are not necessarily related to process units that emit HAP.<sup>2</sup> **Appendix B** provides this mapping of SCCs with products and PCWP process units. A total of 365 SCCs are included for selection in the PCWP ICR.

<sup>2</sup> Facilities completing the ICR are not required to include “other” process units that do not emit HAP. Many of the “other” process units were included in the SCC-process unit type mapping for completeness but have no associated HAP emission factors.

## B. Organic HAP Emission Factors

### 1. Use of AP-42

The number of PCWP SCCs now available greatly exceeds the number of SCCs appearing in AP-42, Chapter 10 (which covers the wood products industry). AP-42 Chapter 10 includes six sections with emission factors for the PCWP industry as shown in Table 2. The SCCs represented in AP-42 Chapter 10 were limited to the number of SCCs with available emission factors for criteria or hazardous air pollutants at that time. The PCWP AP-42 emission factors were last updated following collection of data for the PCWP NESHAP in 2002 and remain the largest single source of emission factors readily available to stakeholders and the public.<sup>3</sup>

**Table 2. PCWP AP-42 Chapters**

Section	Title	Date
10.5	Plywood Manufacturing	January 2002
10.6.2	Particleboard	June 2002
10.6.3	Medium Density Fiberboard	August 2002
10.6.4	Hardboard and Fiberboard	October 2002
10.9	Engineered Wood Products	November 2002

The AP-42 chapters are available at: <https://www3.epa.gov/ttn/chief/ap42/ch10/index.html>

It is acknowledged that the AP-42 emission factors are now somewhat dated in relation to developments in the PCWP industry. The AP-42 emission factors predate the 2007 PCWP NESHAP compliance date when many facilities installed controls on PCWP process units. However, the available uncontrolled AP-42 emission factors could be coupled with control efficiency estimates to estimate controlled emissions for facilities that do not have site-specific measurements or more representative data for certain HAP. The AP-42 emission factors also predate implementation of resin changes to reduce formaldehyde off-gassing from interior PCWP products. It is expected that use of the AP-42 factors would err on the side of overestimating emissions at facilities switching to low- or no-added formaldehyde resins.

In summary, AP-42 was selected as the reference for the organic HAP emission factors used in the Provisional Calculation Tool because:

- There is no other more-comprehensive, publicly-available information source,
- AP-42 is an EPA document that underwent a stakeholder review process prior to finalization, and
- The tradeoffs for using information dating back to 2002 in the tool seem to be a reasonable compromise for reducing the burden for facilities with no current HAP inventory and no other source of information to use for estimating emissions.

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<sup>3</sup> It is acknowledged that updated emission factors are maintained by and available to members of the National Council for Air and Stream Improvement (NCASI) and that member facilities will likely choose to use the NCASI emission factors in preparing their ICR emission inventories. The ICR instructs respondents to use the most-representative means of estimating emissions available to them, including site-specific emissions measurements or, if measurements are not available, emission estimates based on representative emission factors.

In order to use the AP-42 emission factors in the Provisional Calculation Tool, available “sets” of organic HAP emission factors representing uncontrolled emissions were paired with each SCC. As noted above, the number of SCCs exceeds the number of AP-42 emission factors. Therefore, it was necessary to extrapolate related emission factor sets to SCCs not having directly matched factors. A “set” of emission factors includes all the HAP for that SCC for which emission factors were not labeled below detection limit (BDL). The BDL labeling in AP-42 indicates that all of the measurement data used to derive the emission factor for a given pollutant was below the test method detection limit. The AP-42 indicates “BDL” instead of presenting a number in these cases. Emissions estimates based on BDL data are not necessary for the risk modeling inventory; the provisional calculations are designed to inform.

After comparing the pollutants with positive (non-BDL) emission factors in all of the “sets” available, a menu list of HAP compounds for inclusion in the ICR was developed that includes all the HAP for which provisional calculation formulas are available. If applicable, respondents would specify additional HAP compounds beyond those included in the list and provide their own site-specific estimate of HAP emissions. **Appendix C** lists the HAP compounds with provisional calculation formulas. Only a small number of these HAP compounds apply for most process units. For example, methanol and formaldehyde are the most commonly-emitted HAP compounds for PCWP process units, followed by acetaldehyde, acrolein, phenol and propionaldehyde. There is no data to show (and little reason to expect) that most of the other HAP compounds in the list are emitted in detectable amounts. The HAP compounds with positive (non-BDL) emission factors are listed in **Appendix B** for each SCC matched to an emission factor. Process unit types that heat wood (i.e., dryers and presses) have more associated HAP compounds than other wood processing units (e.g., saws, formers, chippers).

For many SCCs there was no HAP emission factor set available, either because no HAP data were available for emission factor development or because all of the available HAP factors were BDL. Many of the PCWP SCCs represent process units that are not known to emit HAP, so it follows that there would be no HAP emission factors for several of the SCCs. These SCCs are labeled with “No EF for SCC” in the EF source column of **Appendix B**. The “No EF for SCC” notation will display in the provisional calculation columns of the *HAP Emissions* tab in the PCWP ICR. Similarly, there are no HAP emission factors for many pollutants, either because no HAP data were available for emission factor development or because all of the available HAP factors were BDL. HAP compounds without emission factors are labeled “No EF for pollutant” in the provisional calculation columns of the *HAP Emissions* tab in the PCWP ICR. Respondents having additional information quantifying HAP emissions for a given process unit with an SCC labeled “No EF for SCC” or “No EF for pollutant” would be expected to enter their own site-specific estimates of HAP emissions, particularly if the HAP emissions are significant enough to have been included in a permit or existing HAP emissions inventory. Alternatively, if there is no reason to expect HAP compound emissions from the process unit with a SCC labeled “No EF for SCC” or “No EF for pollutant” then the respondent may choose not to enter any HAP emissions estimate for the process unit or HAP compound based on their engineering judgement. The most significant HAP emissions in the PCWP source category are associated with process units that heat wood (e.g., dryers, presses).

## 2. Matching the SCCs with Emission Factors

The AP-42 background documentation spreadsheets available at (<https://www3.epa.gov/ttn/chief/ap42/ch10/index.html>) were used as the first step in mapping relevant emission factors to the revised SCCs. Each emission factor set was matched based on the numeric SCC when possible, resulting in approximately 50 direct matches. This step is reflected in the “Emission Factor Grouping (AP-42) exact SCC match” column in **Appendix B**. In this column, N/A means additional effort was needed to identify an emission factor matching the SCC, either because the numeric SCC had changed with the recent SCC revisions or because no exactly-matching AP-42 emission factor was available.

Next, the SCC descriptions were reviewed in conjunction with the emission factor descriptions in the AP-42 background documentation spreadsheets and in the AP-42 chapters. Additional directly relevant matches were identified for SCCs and emission factors.

Finally, the remaining SCCs for which no directly matching emission factors were identified were reviewed to determine if a closely-related or slightly more-conservative emission factor might apply in the absence of any other more-representative, site-specific information. In this step, attempts were made to select the most representative emission factors available, erring on the conservative side to avoid the underestimation of emissions. Where a comparable factor was not available, a conservative approach was taken and the next higher emission factor was used. For example, if no direct-natural gas fired dryer emission factor was in AP-42, but there was a direct wood-fired emission factor for the dryer, the wood fired emission factor was applied. The following conservative substitution assumptions were used:

- Substitution of a softwood emission factors for units processing mixed or hardwood species.
- Substitution of a mixed-species emissions factors for units processing hardwoods.
- Substitution of a direct-wood fired emission factors for direct-gas fired process units.
- Substitution of a direct-wood or direct-gas fired emission factors for indirect-fired process units.
- Substitution of emission factors for formaldehyde-containing resin for process units using non-UF or non-PF resin.
- Substitution of emission factors for blowline blend for non-blowline blend.
- Substitution of emission factors for batch press for continuous presses.
- Substitution of emission factors for dry hardboard press for wet hardboard press.
- Substitution of emission factors for related products (e.g., OSB vs LSL; LVL vs PSL, SPW for LVL). When crossing product types, the presence of formaldehyde in the adhesive and dryer firing method was considered. It was presumed that:
  - Formaldehyde emissions were greater according to the hierarchy of: UF > PF > No HCHO (ex. MDI), and
  - Dryer emissions were greater according to the hierarchy of: direct wood fired > direct natural gas fired > indirect heat.

It is acknowledged that variability in emissions can mask the effects of any of the above variables. Also, given the combination of multiple process characteristics reflected in some of

the available emission factors, in many cases there is no clear way to distinguish which emission factors may be the most conservative (e.g., for hardboard dryers there are multiple competing process characteristics including blend method, softwood/hardwood, firing method, and resin type).

The “Related AP-42 EF to use in absence of more-representative data” column in **Appendix B** of this document includes a description of the most-closely related emission factor included in the provisional calculations. This column is provided in the provisional calculation columns of the *HAP Emissions* tab in the PCWP ICR in order for respondents to judge whether the provisional calculations are based on an emission factor sufficiency representative of their process unit in the absence of more-representative, site-specific information. Respondents are given the option to insert and substitute a more-representative emission factor into the provisional calculations if they have a better emission factor available to them.

Some of the related emission factors require conversions for the production units of measure (e.g., to convert from one panel thickness basis to another). A “scalar” column is included in the *HAP emissions* tab for this purpose. **Appendix D** provides a table showing the scalar factors included in the provisional calculations.

The PCWP ICR instructions document provides a lengthy description of how the provisional calculations work and presents the formulas used to calculate emissions. The calculations include the provisional emission factor, unit of measure scalar, process unit production rate, control efficiency (if applicable), a release point apportionment fraction (for process units with multiple release points), and a conversion from pounds to tons. **Appendix E** contains a table showing the numeric emission factors included in the provisional calculations.

### 3. Lumber kiln emission factors

No AP-42 emission factors are available for lumber kilns. Therefore, a comparison of lumber kiln emission factors from various references was conducted. Emission factors from NCASI were found to align with the various references and were included in the provisional calculations for the lumber kiln SCCs.

### C. HAP Metal Emission Factors

Direct-fired dryers may have burners integral to the dryers (e.g., rotary dryers) or stand-alone combustion units that exhaust through the dryers. It is anticipated that there could be HAP metals emissions associated with combustion of fuels in direct-fired PCWP dryers. Fuel types used in the PCWP industry include:

- Resin free wood, sawdust or bark
- Trim/sawdust containing resin
- Natural gas
- Propane
- Residual/distillate oil
- Other materials used uncommonly such as waste water residuals, used oil, blender cleanings, spray booth solids

Of the fuels listed above, biomass fuels and natural gas are by far the most common. Coal is not used as a PCWP direct-fired dryer fuel. Of the PCWP fuels used, only biomass and fuel oil are expected to have measurable amounts of HAP metals emissions. Use of fuel oil in the PCWP industry is limited.

The EPA is not aware of any HAP metals emissions test data for PCWP direct-fired dryers. However, fuel analysis data for biomass combustion in boilers is available and, in the absence of better information, is reasonably transferable to combustion of these fuels in PCWP dryers for purposes of developing emission estimates for the EPA's residual risk analysis. However, boiler data would not be useful for setting metals emissions limits for dryers. Actual metals emissions data from dryers would be needed for this purpose or a PM-surrogate could be considered.

Fuel analysis data from the May 2012 Boiler MACT emission data base was queried based on NAICS 321 for the combustion unit types most relevant to direct-fired dryer combustion units burning forest biomass (stoker/sloped grate and suspension burner). The average standardized concentration in milligrams per gram of fuel (mg/g) and the standardized fuel-based emission factor in pounds per million Btu (lb/MMBtu) are summarized in Table 3 along with the non-detect rate. As a conservative measure (more likely to overestimate emissions), detection limit values available for non-detect samples were included in the averages presented in Table 3. The uncontrolled lb/MMBtu values in Table 3 can be coupled with facility-specific PM control efficiency (if known) to estimate HAP metals emissions from PCWP direct-fired dryers. Assuming a PM collection efficiency of 99 percent, the emission rates in Table 3 were found to compare reasonably with emission factors presented in NCASI Technical Bulletin 1013<sup>4</sup> for HAP metals from biomass boilers of various designs and control devices. The emission factors derived from the boiler MACT data also compare favorably to those in AP-42 Chapter 1.6, though it is noted that the AP-42 factors represent a mixture of controlled and uncontrolled data.

The biomass emission factors in Table 3 were included in the provisional calculations to estimate direct wood-fired emissions for the following types of dryers: dry rotary dryers, green rotary dryers, primary tube dryers, softwood veneer dryers, and rotary strand dryers. If other types of dryers are direct-wood fired, facilities may use the emission factors in Table 3 to estimate emissions on a facility-specific basis.

For oil-fired PCWP dryers, uncontrolled emission factors from the AP-42 section 1.3<sup>5</sup> for residual fuel oil combustion in boilers can be coupled with facility-specific PM control efficiency (if known) to estimate HAP metals emissions. These emission factors were converted to lb/MMBtu using an average heating value of 0.145 MMBtu per gallon as shown in Table 4. Facilities may use these emission factors for direct oil-fired dryers. The oil-fired emissions

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<sup>4</sup> National Council for Air and Stream Improvement. *A Comprehensive Compilation and Review of Wood-Fired Boiler Emissions*. Technical Bulletin 1013, March 2013.

<sup>5</sup> AP 42, Fifth Edition, Volume I. Section 1.3: Fuel Oil Combustion, Supplement E September 1999, corrected May 2010. <https://www3.epa.gov/ttn/chief/ap42/ch01/final/c01s03.pdf>



factors were not programed into the provisional calculations because there are no PCWP SCC codes specific to oil firing.

In the absence of site-specific control efficiency information, suggested default control efficiencies for purposes of PCWP direct-fired process unit metal HAP estimates are as follows:

- Wet or dry electrostatic precipitator or baghouse – 99%
- Mechanical collector cyclone or multiclone – 90%
- Wet scrubber - 95%

These values are based on review of control technology fact sheets.<sup>6</sup>

The toxicity of chromium and mercury is largely dependent on the oxidation state of these compounds, and is an important factor in evaluating the health effects from exposure to chromium and mercury compounds. Chromium (Cr) exists in several different oxidation states, but the most stable and most commonly found are hexavalent chromium (Cr<sup>+6</sup> valence state) (or Cr VI) and trivalent chromium (Cr<sup>+3</sup> valence state) (or Cr III). The most common mercury species are divalent mercury (Hg<sup>+2</sup>) (including both particulate and gaseous forms) and elemental gaseous mercury (Hg<sup>0</sup>). In the absence of data on the specific oxidation state of chromium or mercury, emissions data reported can be speciated using the NEI default multipliers of 0.2 for particulate divalent mercury, 0.3 for gaseous divalent mercury, and 0.5 for elemental gaseous mercury. Only particulate divalent mercury would be coupled with a PM control device efficiency for purposes of estimating emissions. The default multipliers for PCWP SCC codes of 0.28 for hexavalent chromium (Cr IV) and 0.72 for trivalent chromium (Cr III) may be used. Emission factors adjusted with these multipliers are presented in Tables 3 and 4.

**Table 3. Summary of HAP Metals Provided in the 2012 Boiler Fuel Analysis Data Set for Stoker/Sloped Grate Boilers and Suspension Burners for NAICS 321: Wood Products Manufacturing**

HAP metal	Concentration		ND rate	lb/MMBtu (uncontrolled)	lb/MMBtu (99% control)
	mg/g	mg/kg			
Antimony (Sb)	0.000364	0.36	73%	4.21E-05	4.21E-07
Arsenic (As)	0.001053	1.1	47%	1.11E-04	1.11E-06
Beryllium (Be)	0.000225	0.22	54%	2.10E-05	2.10E-07
Cadmium (Cd)	0.000233	0.23	20%	2.44E-05	2.44E-07
Chromium (Cr)	0.001231	1.2	13%	1.66E-04	1.66E-06
Cr IV				4.66E-05 <sup>1</sup>	
Cr III				1.20E-04 <sup>1</sup>	
Cobalt (Co)	0.000235	0.23	32%	2.69E-05	2.69E-07
Lead (Pb)	0.000761	0.76	31%	8.29E-05	8.29E-07
Manganese (Mn)	0.347037	347	0.3%	3.97E-02	3.97E-04
Mercury (Hg)	0.001441	1.4	17%	1.66E-04	1.66E-06
Particulate Hg <sup>+2</sup>				3.32E-05 <sup>1</sup>	

<sup>6</sup> Air Pollution Control Technology Fact Sheets available at <https://www.epa.gov/catc/clean-air-technology-center-products#factsheets>

HAP metal	Concentration		ND rate	lb/MMBtu (uncontrolled)	lb/MMBtu (99% control)
	mg/g	mg/kg			
Gaseous Hg <sup>+2</sup>				4.98E-05 <sup>1</sup>	
Elemental gaseous Hg				8.31E-05 <sup>1</sup>	
Nickel (Ni)	0.003777	3.8	16%	4.51E-04	4.51E-06
Selenium (Se)	0.017402	17	52%	2.01E-03	2.01E-05

1. Speciated based on the chromium and mercury emission factors using default multipliers as described above.

**Table 4. Summary of HAP Metals Provided in AP-42 Section 1.3  
for Residual Oil Fired Boilers**

HAP metal	lb/1000 gal (uncontrolled)	lb/MMBtu <sup>1</sup> (uncontrolled)
Antimony (Sb)	5.25E-03	3.62E-05
Arsenic (As)	1.32E-03	9.10E-06
Beryllium (Be)	2.75E-05	1.90E-07
Cadmium (Cd)	3.98E-04	2.74E-06
Chromium (Cr)	8.45E-04	5.83E-06
Cr IV	2.48E-04	1.71E-06
Cr III		4.12E-06 <sup>2</sup>
Cobalt (Co)	6.02E-03	4.15E-05
Lead (Pb)	1.51E-03	1.04E-05
Manganese (Mn)	3.00E-03	2.07E-05
Mercury (Hg)	1.13E-04	7.79E-07
Particulate Hg <sup>+2</sup>		1.56E-07 <sup>3</sup>
Gaseous Hg <sup>+2</sup>		1.17E-04 <sup>3</sup>
Elemental gaseous Hg		9.42E-07 <sup>3</sup>
Nickel (Ni)	8.45E-02	5.83E-04
Selenium (Se)	6.83E-04	4.71E-06

1. Converted to lb/MMBtu using a heating value of 0.145 MMBtu per gallon.

2. Calculated as the difference between the AP-42 emission factors for Cr and Cr VI.

3. Speciated based on the chromium and mercury emission factors using default multipliers as described above.

The PCWP ICR Instructions document describes the formulas used in the provisional calculations for metals. Because only biomass firing is included in the calculations, the dryer heat input (MMBtu/hr) associated with biomass is determined from elsewhere in the spreadsheet. Respondents are asked to provide a value for PM control efficiency. The heat input is multiplied by the emission factor (lb/MMBtu), control efficiency, and the process unit operating hours reported in the ICR. A release point apportionment fraction (for process units with multiple release points) is applied and emissions are converted to tons per year.

### III. Summary

This memorandum explains the methods used to assign and apply available emission factors in a Provisional Calculation Tool included in the PCWP ICR. The tool is comprised of calculations within the *HAP Emissions* tab of the ICR. Use of the provisional calculations is

optional. The tool is intended to aid facilities that either do not maintain HAP emissions inventories or do not have site-specific or more-representative data.

## Appendix A. SCC Codes Removed from the ICR

The following wood products industry SCCs covering green-end wood handling and lumber processing operations other than drying and are not relevant for the PCWP ICR.

PCWP	SCC	SCC Level Four
PB	30700693	Combined Process Unit Type Dust Collection: Green Wood Material: Softwood
PB	30700694	Combined Process Unit Type Dust Collection: Green Wood Material: Hardwood
plywood	30700723	Sawing Operations: Green Veneer Trimming: Hardwood
plywood	30700724	Sawing Operations: Green Veneer Trimming: Softwood
plywood	30700775	Combined Process Unit Type Dust Collection: Green Wood Material: Softwood
plywood	30700776	Combined Process Unit Type Dust Collection: Green Wood Material: Hardwood
plywood	30700790	Hammermill/Chipper: Green Wood Material: Softwood
plywood	30700795	Hammermill/Chipper: Green Wood Material: Hardwood
plywood	30700796	Hammermill/Chipper: Mixed Green and Dry Wood Material
lumber	30700801	Log Debarking
lumber	30700802	Log Sawing
lumber	30700803	Sawdust Pile Handling
lumber	30700804	Sawing: Cyclone Exhaust
lumber	30700805	Planing/Trimming: Cyclone Exhaust
lumber	30700806	Sanding Operations: Cyclone Exhaust
lumber	30700808	Other Operations: Cyclone Exhaust
lumber	30700809	Other Operations: Cyclone Exhaust: Green Wood Material: Softwood
lumber	30700810	Other Operations: Cyclone Exhaust: Green Wood Material: Hardwood
lumber	30700811	Other Operations: Cyclone Exhaust: Dry Wood Material
lumber	30700812	Other Operations: Cyclone Exhaust: Mixed Green and Dry Wood Material
lumber	30700818	Chipping and Screening: Softwood
lumber	30700819	Chipping and Screening: Hardwood
lumber	30700820	Chipping and Screening
lumber	30700821	Chip Storage Piles
lumber	30700822	Chip Transfer/Conveying
lumber	30700825	Chip Transfer/Conveying: Softwood
lumber	30700826	Chip Transfer/Conveying: Hardwood
lumber	30700827	Chip Storage Piles: Softwood
lumber	30700828	Chip Storage Piles: Hardwood
lumber	30700893	Log Storage: Softwood
lumber	30700894	Log Storage: Hardwood
lumber	30700895	Log Storage
lumber	30700897	Softwood Sawmill Operations: Other Not Classified
lumber	30700898	Hardwood Sawmill Operations: Other Not Classified
lumber	30700899	Other Not Classified
MDF	30700992	Combined Process Unit Type Dust Collection: Green Wood Material: Softwood

PCWP	SCC	SCC Level Four
MDF	30700993	Combined Process Unit Type Dust Collection: Green Wood Material: Hardwood
OSB	30701065	Combined Process Unit Type Dust Collection: Green Wood Material: Softwood
OSB	30701066	Combined Process Unit Type Dust Collection: Green Wood Material: Hardwood
OSB	30701081	Waferizer/Strander
OSB	30701082	Hammermill/Chipper: Green Wood Material: Softwood
OSB	30701083	Hammermill/Chipper: Green Wood Material: Hardwood
HB	30701491	Combined Process Unit Type Dust Collection: Green Wood Material: Softwood
HB	30701492	Combined Process Unit Type Dust Collection: Green Wood Material: Hardwood
FB	30701565	Combined Process Unit Type Dust Collection: Green Wood Material: Hardwood
FB	30701566	Combined Process Unit Type Dust Collection: Green Wood Material: Softwood
LVL	30701621	Hammermill/Chipper: Green Wood Material: Softwood
LVL	30701622	Hammermill/Chipper: Green Wood Material: Hardwood
LVL	30701625	Sawing Operations: Green Veneer Trimming: Hardwood
LVL	30701626	Sawing Operations: Green Veneer Trimming: Softwood
LVL	30701631	Combined Process Unit Type Dust Collection: Green Wood Material: Softwood
LVL	30701632	Combined Process Unit Type Dust Collection: Green Wood Material: Hardwood
LSL	30701726	Strander
LSL	30701732	Hammermill/Chipper: Green Wood Material: Softwood
LSL	30701733	Hammermill/Chipper: Green Wood Material: Hardwood
PSL	30701763	Hammermill/Chipper: Green Wood Material: Softwood
PSL	30701764	Hammermill/Chipper: Green Wood Material: Hardwood
PSL	30701768	Sawing Operations: Green Veneer Trimming
PSL	30701770	Combined Process Unit Type Dust Collection: Green Wood Material: Softwood
PSL	30701771	Combined Process Unit Type Dust Collection: Green Wood Material: Hardwood

## Appendix B. Crosswalk of SCCs and Emission Factor Sets

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
PB	30700635	Dry Rotary Dryer: Indirect-heated: <600F Inlet air, <30%MC: Softwood	Dry rotary dryer	PB, rotary, indirect heated with auxiliary natural gas, softwood	Particleboard, rotary, indirect heated with auxiliary natural gas, softwood	AP-42, Ch 10.6.2	lb/ODT	Formaldehyde, Methanol
PB	30700636	Dry Rotary Dryer: Indirect-heated: <600F Inlet air, <30%MC: Hardwood	Dry rotary dryer	#N/A	Particleboard, rotary, indirect heated with auxiliary natural gas, softwood	AP-42, Ch 10.6.2	lb/ODT	Formaldehyde, Methanol
PB	30700637	Dry Rotary Dryer: Indirect-heated: <600F Inlet air, <30%MC: Mixed Softwood/Hardwood	Dry rotary dryer	#N/A	Particleboard, rotary, indirect heated with auxiliary natural gas, softwood	AP-42, Ch 10.6.2	lb/ODT	Formaldehyde, Methanol
PB	30700641	Former Operations: Urea Formaldehyde Resin	Former	#N/A	MDF, former without blowline blend, UF resin (includes blender emissions)	AP-42, Ch 10.6.3	lb/ODT	Formaldehyde, Methanol
PB	30700642	Former Operations: Non-Urea Formaldehyde Resin	Former	#N/A	MDF, former without blowline blend, UF resin (includes blender emissions)	AP-42, Ch 10.6.3	lb/ODT	Formaldehyde, Methanol
PB	30700648	Blender: Urea Formaldehyde Resin	Blender	#N/A	MDF paddle blender, UF resin	AP-42, Ch 10.6.3	lb/ODT	Formaldehyde, Methanol
PB	30700649	Blender: Non-Urea Formaldehyde Resin	Blender	#N/A	MDF paddle blender, UF resin	AP-42, Ch 10.6.3	lb/ODT	Formaldehyde, Methanol
PB	30700651	Reconstituted Wood Products Press: Batch: Urea Formaldehyde Resin	Reconstituted wood product press	PB, press, UF resin	Particleboard, press, UF resin	AP-42, Ch 10.6.2	lb/MSF 3/4	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Benzene, MIBK
PB	30700652	Reconstituted Wood Products Press: Continuous: Urea Formaldehyde Resin	Reconstituted wood product press	#N/A	Particleboard, press, UF resin	AP-42, Ch 10.6.2	lb/MSF 3/4	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Benzene, MIBK
PB	30700653	Reconstituted Wood Products Press: Continuous: Non-Urea Formaldehyde Resin	Reconstituted wood product press	#N/A	Particleboard, press, UF resin	AP-42, Ch 10.6.2	lb/MSF 3/4	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Benzene, MIBK
PB	30700654	Reconstituted Wood Products Press: Batch: Non-Urea Formaldehyde Resin	Reconstituted wood product press	#N/A	Particleboard, press, UF resin	AP-42, Ch 10.6.2	lb/MSF 3/4	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Benzene, MIBK
PB	30700656	Agriculture Fiber Board Press	Agriculture fiber board press	#N/A		No EF for SCC		

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
PB	30700657	Flaker: Hardwood	Other	#N/A	Particleboard, flaker/refiner/hammermill	AP-42, Ch 10.6.2	lb/ODT	Methanol, Phenol
PB	30700658	Flaker: Softwood	Other	#N/A	Particleboard, flaker/refiner/hammermill	AP-42, Ch 10.6.2	lb/ODT	Methanol, Phenol
PB	30700660	Board Cooler: Non-Urea Formaldehyde Resin	Reconstituted wood product board cooler	#N/A	Particleboard, board cooler, UF resin	AP-42, Ch 10.6.2	lb/MSF 3/4	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, MIBK
PB	30700661	Board Cooler: Urea Formaldehyde Resin	Reconstituted wood product board cooler	PB board cooler, UF resin	Particleboard, board cooler, UF resin	AP-42, Ch 10.6.2	lb/MSF 3/4	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Benzene, MIBK
PB	30700662	Refiner: Green Wood Material: Hardwood	Atmospheric refiner	#N/A	Particleboard, flaker/refiner/hammermill	AP-42, Ch 10.6.2	lb/ODT	Methanol, Phenol
PB	30700663	Refiner: Dry Wood Materials	Atmospheric refiner	#N/A	Particleboard, flaker/refiner/hammermill	AP-42, Ch 10.6.2	lb/ODT	Methanol, Phenol
PB	30700664	Refiner: Green Wood Material: Softwood	Atmospheric refiner	PB flaker/refiner/hammermill	Particleboard, flaker/refiner/hammermill	AP-42, Ch 10.6.2	lb/ODT	Methanol, Phenol
PB	30700665	Sanding Operations	Finishing sander	PB sander	Particleboard, sander	AP-42, Ch 10.6.2	lb/MSF	Methanol, Phenol
PB	30700666	Refiner: Mixed Dry and Green Wood Material	Atmospheric refiner	#N/A	Particleboard, flaker/refiner/hammermill	AP-42, Ch 10.6.2	lb/ODT	Methanol, Phenol
PB	30700667	Sanding Operations: Urea Formaldehyde Resin	Finishing sander	#N/A	Particleboard, sander	AP-42, Ch 10.6.2	lb/MSF	Methanol, Phenol
PB	30700668	Sanding Operations: Non-Urea Formaldehyde Resin	Finishing sander	#N/A	Particleboard, sander	AP-42, Ch 10.6.2	lb/MSF	Methanol, Phenol
PB	30700670	Dry Rotary Dryer: Direct Wood-fired: <600F Inlet air, <30%MC: Hardwood	Dry rotary dryer	#N/A	Particleboard, Rotary dryer, direct wood-fired, softwood	AP-42, Ch 10.6.2	lb/ODT	HAP metals, Acetaldehyde, Acrolein, Acetophenone, Benzene, Biphenyl, Bis-(2-ethylhexyl phthalate), Bromomethane, Carbon disulfide, Carbon tetrachloride, Chloromethane, Cumene, Dibutylphthalate, Ethyl benzene, Formaldehyde, Hydroquinone, xylenes, methanol, Methylene chloride, MIBK, n-Hexane, Propionaldehyde, Styrene, Toluene, Phenol, 1,1,1-Trichloroethane

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
PB	30700671	Dry Rotary Dryer: Direct Wood-fired: <600F Inlet air, <30%MC: Softwood	Dry rotary dryer	#N/A	Particleboard, Rotary dryer, direct wood-fired, softwood	AP-42, Ch 10.6.2	lb/ODT	HAP metals, Acetaldehyde, Acrolein, Acetophenone, Benzene, Biphenyl, Bis-(2-ethylhexyl phthalate), Bromomethane, Carbon disulfide, Carbon tetrachloride, Chloromethane, Cumene, Dibutylphthalate, Ethyl benzene, Formaldehyde, Hydroquinone, xylenes, methanol, Methylene chloride, MIBK, n-Hexane, Propionaldehyde, Styrene, Toluene, Phenol, 1,1,1-Trichloroethane
PB	30700672	Dry Rotary Dryer: Direct Wood-fired: <600F Inlet air, <30%MC: Mixed Softwood/Hardwood	Dry rotary dryer	#N/A	Particleboard, Rotary dryer, direct wood-fired, softwood	AP-42, Ch 10.6.2	lb/ODT	Acetaldehyde, Acrolein, Acetophenone, Benzene, Biphenyl, Bis-(2-ethylhexyl phthalate), Bromomethane, Carbon disulfide, Carbon tetrachloride, Chloromethane, Cumene, Dibutylphthalate, Ethyl benzene, Formaldehyde, Hydroquinone, xylenes, methanol, Methylene chloride, MIBK, n-Hexane, Propionaldehyde, Styrene, Toluene, Phenol, 1,1,1-Trichloroethane, HAP metals
PB	30700673	Dry Rotary Dryer: Direct Natural Gas-fired: <600F Inlet air, <30%MC: Hardwood	Dry rotary dryer	#N/A	Particleboard, Rotary dryer, direct natural gas-fired, hardwood	AP-42, Ch 10.6.2	lb/ODT	Formaldehyde
PB	30700674	Dry Rotary Dryer: Direct Natural Gas-fired: <600F Inlet air, <30%MC: Softwood	Dry rotary dryer	#N/A	Particleboard, Rotary dryer, direct natural gas-fired, softwood	AP-42, Ch 10.6.2	lb/ODT	Formaldehyde, Methanol
PB	30700675	Dry Rotary Dryer: Direct Natural Gas-fired: <600F Inlet air, <30%MC: Mixed Softwood/Hardwood	Dry rotary dryer	#N/A	Particleboard, Rotary dryer, direct natural gas-fired, softwood	AP-42, Ch 10.6.2	lb/ODT	Formaldehyde, Methanol



PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
PB	30700676	Green Rotary Dryer: Direct Wood-fired: Hardwood	Green rotary dryer	#N/A	Particleboard, green dryer, rotary, direct wood-fired, mixed wood species (40-60% softwood, 40-60% hardwood)	AP-42, Ch 10.6.2	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, Benzene, Methylene chloride, Styrene, Toluene, Xylenes, HAP metals
PB	30700677	Green Rotary Dryer: Direct Wood-fired: Softwood	Green rotary dryer	#N/A	Particleboard, green dryer, rotary, direct wood-fired, softwood	AP-42, Ch 10.6.2	lb/ODT	Acetaldehyde, Acrolein-Formaldehyde, Methanol, Phenol, Propionaldehyde, Benzene, Chloroform, Cumene, MIBK, Methylene chloride, Styrene, Toluene, Xylenes, HAP metals
PB	30700678	Green Rotary Dryer: Direct Wood-fired: Mixed Softwood/Hardwood	Green rotary dryer	#N/A	Particleboard, green dryer, rotary, direct wood-fired, mixed wood species (40-60% softwood, 40-60% hardwood)	AP-42, Ch 10.6.2	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, Benzene, Methylene chloride, Styrene, Toluene, Xylenes, HAP metals
PB	30700679	Green Rotary Dryer: Direct Natural Gas-fired: Hardwood	Green rotary dryer	#N/A	Particleboard, green dryer, rotary, direct natural gas-fired, softwood	AP-42, Ch 10.6.2	lb/ODT	Formaldehyde
PB	30700680	Green Rotary Dryer: Direct Natural Gas-fired: Softwood	Green rotary dryer	#N/A	Particleboard, green dryer, rotary, direct natural gas-fired, softwood	AP-42, Ch 10.6.2	lb/ODT	Formaldehyde
PB	30700681	Green Rotary Dryer: Direct Natural Gas-fired: Mixed Softwood/Hardwood	Green rotary dryer	#N/A	Particleboard, green dryer, rotary, direct natural gas-fired, softwood	AP-42, Ch 10.6.2	lb/ODT	Formaldehyde
PB	30700682	Green Rotary Dryer: Indirect-heated: Hardwood	Green rotary dryer	#N/A	Particleboard, Rotary dryer, indirect heated with auxiliary natural gas, softwood	AP-42, Ch 10.6.2	lb/ODT	Formaldehyde, Methanol
PB	30700683	Green Rotary Dryer: Indirect-heated: Softwood	Green rotary dryer	#N/A	Particleboard, Rotary dryer, indirect heated with auxiliary natural gas, softwood	AP-42, Ch 10.6.2	lb/ODT	Formaldehyde, Methanol

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
PB	30700684	Green Rotary Dryer: Indirect-heated: Mixed Softwood/Hardwood	Green rotary dryer	#N/A	Particleboard, Rotary dryer, indirect heated with auxiliary natural gas, softwood	AP-42, Ch 10.6.2	lb/ODT	Formaldehyde, Methanol
PB	30700685	Agriculture Fiber Rotary Dryer	Rotary agricultural fiber dryer	#N/A		No EF for SCC		
PB	30700686	Panel Trim Hammermill/Chipper	Panel trim chipper	#N/A	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim	Methanol
PB	30700687	Sawing Operations: Pre-Press: Urea Formaldehyde Resin	Finishing saw	#N/A	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim	Methanol
PB	30700688	Sawing Operations: Pre-Press: Non-Urea Formaldehyde Resin	Finishing saw	#N/A	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim	Methanol
PB	30700689	Sawing Operations: Post-Press: Pre-Board Cooler: Urea Formaldehyde Resin	Finishing saw	#N/A	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim	Methanol
PB	30700690	Sawing Operations: Post-Press: Pre-Board Cooler: Non-Urea Formaldehyde Resin	Finishing saw	#N/A	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim	Methanol
PB	30700691	Sawing Operations: Post-Board Cooler: Urea Formaldehyde Resin	Finishing saw	#N/A	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim	Methanol
PB	30700692	Sawing Operations: Post-Board Cooler: Non-Urea Formaldehyde Resin	Finishing saw	#N/A	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim	Methanol
PB	30700695	Combined Process Unit Type Dust Collection: Dry Wood Material	Other	#N/A	PB flaker/refiner/hammermill	AP-42, Ch 10.6.2	lb/ODT	Methanol, Phenol
PB	30700696	Combined Process Unit Type Dust Collection: Mixed Dry and Green Wood Material	Other	#N/A	PB flaker/refiner/hammermill	AP-42, Ch 10.6.2	lb/ODT	Methanol, Phenol

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
PB	30700697	Resin Storage Tanks	Resin storage tank	#N/A		No EF for SCC		
PB	30700698	Miscellaneous Coating Operations	Miscellaneous coating operation	#N/A		No EF for SCC		
PB	30700699	Other Not Classified	Other	#N/A		No EF for SCC		
plywood	30700702	Sanding Operations	Finishing sander	#N/A	SPW sander (8-drum sander, 1-drum sander, & specialty saw)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol
plywood	30700710	Sawing Operations: Dry Veneer and Plywood Trimming	Finishing saw	#N/A	Softwood plywood saws (includes 3 saws, hog, and sander)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol
plywood	30700720	Veneer Redryer: Steam-heated	Veneer redryer	#N/A	Radio frequency heated redryer, softwood	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol
plywood	30700727	Veneer Laying and Glue Spreading	Other	#N/A		No EF for SCC		
plywood	30700731	Log Steaming Vat	Log vat	#N/A	SPW log steaming vat (process rate = volume of wood removed from vat per hour)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Methanol
plywood	30700732	Resin Storage Tanks	Resin storage tank	#N/A		No EF for SCC		
plywood	30700734	Hardwood Veneer Dryer: Direct Wood-fired: Heated Zones	Hardwood veneer dryer	HPW, veneer, direct wood-fired, hardwood (heated zones)	HPW, veneer, direct wood-fired, hardwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol, HAP metals
plywood	30700735	Hardwood Veneer Dryer: Direct Wood-fired: Cooling Section	Hardwood veneer dryer	HPW, veneer, direct wood-fired, hardwood (cooling section)	HPW, veneer, direct wood-fired, hardwood (cooling section)	AP-42, Ch 10.5 (All EF BDL)		
plywood	30700736	Softwood Veneer Dryer: Direct Wood-fired: Heated Zones	Softwood veneer dryer	SPW, veneer, direct wood-fired, softwood (heated zones)	SPW, veneer, direct wood-fired, softwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	Formaldehyde, HAP metals
plywood	30700737	Softwood Veneer Dryer: Direct Wood-fired: Cooling Section	Softwood veneer dryer	#N/A	SPW, veneer, direct natural gas-fired, softwood (cooling section)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol, Phenol

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
plywood	30700752	Softwood Veneer Dryer: Direct Natural Gas-fired: Heated Zones	Softwood veneer dryer	SPW, veneer, direct natural gas-fired, softwood (heated zones)	SPW, veneer, direct natural gas-fired, softwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, Benzene, MIBK, Styrene, Toluene, Xylenes
plywood	30700753	Softwood Veneer Dryer: Direct Natural Gas-fired: Cooling Section	Softwood veneer dryer	SPW, veneer, direct natural gas-fired, softwood (cooling section)	SPW, veneer, direct natural gas-fired, softwood (cooling section)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol, Phenol
plywood	30700754	Hardwood Veneer Dryer: Direct Natural Gas-fired: Heated Zones	Hardwood veneer dryer	#N/A	HPW, veneer, direct wood-fired, hardwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol
plywood	30700755	Hardwood Veneer Dryer: Direct Natural Gas-fired: Cooling Section	Hardwood veneer dryer	#N/A	HPW, veneer, direct wood-fired, hardwood (cooling section)	AP-42, Ch 10.5 (All EF BDL)		
plywood	30700756	Hardwood Veneer Dryer: Indirect-heated: Heated Zones	Hardwood veneer dryer	HPW, veneer, indirect heated, hardwood (heated zones)	HPW, veneer, indirect heated, hardwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol, Phenol, MIBK
plywood	30700757	Hardwood Veneer Dryer: Indirect-heated: Cooling Section	Hardwood veneer dryer	HPW, veneer, indirect heated, hardwood (cooling section)	HPW, veneer, indirect heated, hardwood (cooling section)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol, MIBK
plywood	30700762	Softwood Veneer Dryer: Indirect-heated: Heated Zones	Softwood veneer dryer	SPW, veneer, indirect heated, softwood (heated zones)	SPW, veneer, indirect heated, softwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol, Phenol, MIBK, Acrolein, Propionaldehyde, Benzene, Toluene, Xylenes
plywood	30700763	Softwood Veneer Dryer: Indirect-heated: Cooling Section	Softwood veneer dryer	SPW, veneer, indirect heated, softwood (cooling section)	SPW, veneer, indirect heated, softwood (cooling section)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol, Phenol, MIBK, Xylenes
plywood	30700770	Veneer Redryer: Radio Frequency-heated: Hardwood	Veneer redryer	#N/A	SPW, veneer, RF heated, softwood	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol
plywood	30700771	Veneer Redryer: Radio Frequency-heated: Softwood	Veneer redryer	SPW, veneer, RF heated, softwood	SPW, veneer, RF heated, softwood	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol
plywood	30700773	Board Cooler	Other	#N/A		No EF for SCC		
plywood	30700777	Combined Process Unit Type Dust Collection: Dry Wood Material	Other	#N/A	SPW skinner & equalizer saws (3 saws, hog, and sander)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
plywood	30700778	Combined Process Unit Type Dust Collection: Mixed Dry and Green Wood Material	Other	#N/A	SPW skinner & equalizer saws (3 saws, hog, and sander)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol
plywood	30700782	Press: Non-Phenol Formaldehyde Resin: Softwood	Softwood plywood press	#N/A	Softwood Plywood, press, PF resin	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol, Phenol, MIBK
plywood	30700783	Press: Phenol Formaldehyde Resin: Softwood	Softwood plywood press	Softwood Plywood, press, PF resin	Softwood Plywood, press, PF resin	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol, Phenol, MIBK
plywood	30700784	Press: Non-Urea Formaldehyde Resin: Hardwood	Hardwood plywood press	#N/A		No EF for SCC		
plywood	30700785	Press: Urea Formaldehyde Resin: Hardwood	Hardwood plywood press	Hardwood Plywood, press, UF resin	Hardwood Plywood, press, UF resin	AP-42, Ch 10.5	lb/MSF 3/8	Formaldehyde, Methanol, Phenol, MIBK
plywood	30700791	Hammermill/Chipper: Dry Wood Material	Panel trim chipper	SPW dry trim chipper (chips dry trim from SPW panel saws; process rate = finished board production)	SPW dry trim chipper (chips dry trim from SPW panel saws; process rate = finished board production)	AP-42, Ch 10.5	lb/MSF 3/8	Methanol
plywood	30700794	Miscellaneous Coating Operations	Miscellaneous coating operation	#N/A		No EF for SCC		
plywood	30700799	Other Not Classified	Other	#N/A		No EF for SCC		
lumber	30700841	Lumber Kiln: Indirect-heated: Softwood: Pine Species	Lumber kiln	#N/A		NCASI Emission Factors 2014	lb/MBF	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde
lumber	30700842	Lumber Kiln: Indirect-heated: Softwood: Non-Pine Species	Lumber kiln	#N/A		NCASI Emission Factors 2014	lb/MBF	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde
lumber	30700843	Lumber Kiln: Indirect-heated: Hardwood	Lumber kiln	#N/A		NCASI Emission Factors 2014	lb/MBF	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde
lumber	30700844	Lumber Kiln: Direct-fired: Softwood: Pine Species	Lumber kiln	#N/A		NCASI Emission Factors 2014	lb/MBF	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
lumber	30700845	Lumber Kiln: Direct-fired: Softwood: Non-Pine Species	Lumber kiln	#N/A		NCASI Emission Factors 2014	lb/MBF	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde
lumber	30700846	Lumber Kiln: Direct-fired: Hardwood	Lumber kiln	#N/A		NCASI Emission Factors 2014	lb/MBF	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde
MDF	30700909	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Blowline Blend: Non-Urea Formaldehyde Resin: Softwood	Primary tube dryer	#N/A	MDF, tube, direct wood-fired, blowline blend, UF, softwood	AP-42, Ch 10. 6.3	lb/ODT	Formaldehyde
MDF	30700910	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Blowline Blend: Non-Urea Formaldehyde Resin: Hardwood	Primary tube dryer	#N/A	MDF, tube, direct wood-fired, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT	Formaldehyde
MDF	30700911	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Blowline Blend: Non-Urea Formaldehyde Resin: Mixed Softwood/Hardwood	Primary tube dryer	#N/A	MDF, tube, direct wood-fired, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT	Formaldehyde
MDF	30700912	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Blowline Blend: Urea Formaldehyde Resin: Hardwood	Primary tube dryer	#N/A	MDF, tube, direct wood-fired, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT	Formaldehyde
MDF	30700913	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Blowline Blend: Urea Formaldehyde Resin: Softwood	Primary tube dryer	#N/A	MDF, tube, direct wood-fired, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT	Formaldehyde
MDF	30700914	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Blowline Blend: Urea Formaldehyde Resin: Mixed Softwood/Hardwood	Primary tube dryer	#N/A	MDF, tube, direct wood-fired, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT	Formaldehyde

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
MDF	30700915	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Non-Blowline Blend: Softwood	Primary tube dryer	#N/A	MDF, tube, direct wood-fired, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT	Formaldehyde, HAP metals
MDF	30700916	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Non-Blowline Blend: Hardwood	Primary tube dryer	#N/A	MDF, Tube dryer, direct natural gas-fired, non-blowline blend, hardwood	AP-42, Ch 10.6.3	lb/ODT	Methanol, Formaldehyde, HAP metals
MDF	30700917	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Non-Blowline Blend: Mixed Softwood/Hardwood	Primary tube dryer	#N/A	MDF, Tube dryer, direct natural gas-fired, non-blowline blend, hardwood	AP-42, Ch 10.6.3	lb/ODT	Methanol, Formaldehyde, HAP metals
MDF	30700918	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Non-Urea Formaldehyde Resin: Hardwood	Primary tube dryer	#N/A	MDF, tube, direct wood-fired, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT	Formaldehyde, HAP metals
MDF	30700919	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Non-Urea Formaldehyde Resin: Mixed Softwood/Hardwood	Primary tube dryer	#N/A	MDF, tube, direct wood-fired, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT	Formaldehyde, HAP metals
MDF	30700920	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Non-Urea Formaldehyde Resin: Softwood	Primary tube dryer	#N/A	MDF, tube, direct wood-fired, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT	Formaldehyde, HAP metals
MDF	30700923	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Urea Formaldehyde Resin: Softwood	Primary tube dryer	MDF, tube, direct wood-fired, blowline blend, UF, softwood	MDF, tube, direct wood-fired, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT	Formaldehyde, HAP metals

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
MDF	30700924	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Urea Formaldehyde Resin: Mixed Softwood/Hardwood	Primary tube dryer	#N/A	MDF, tube, direct wood-fired, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT	Formaldehyde, HAP metals
MDF	30700925	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Urea Formaldehyde Resin: Hardwood	Primary tube dryer	#N/A	MDF, tube, direct wood-fired, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT	Formaldehyde, HAP metals
MDF	30700926	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Non-Blowline Blend: Softwood	Primary tube dryer	#N/A	MDF, tube, direct natural gas-fired, non-blowline blend, hardwood	AP-42, Ch 10.6.3	lb/ODT	Formaldehyde, Methanol
MDF	30700927	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Non-Blowline Blend: Hardwood	Primary tube dryer	MDF, tube, direct natural gas-fired, non-blowline blend, hardwood	MDF, tube, direct natural gas-fired, non-blowline blend, hardwood	AP-42, Ch 10.6.3	lb/ODT	Formaldehyde, Methanol
MDF	30700928	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Non-Blowline Blend: Mixed Softwood/Hardwood	Primary tube dryer	#N/A	MDF, tube, direct natural gas-fired, non-blowline blend, hardwood	AP-42, Ch 10.6.3	lb/ODT	Formaldehyde, Methanol
MDF	30700929	Pressurized Refiner/Primary Tube Dryer: Indirect-heated: Blowline Blend: Non-Urea Formaldehyde Resin: Softwood	Primary tube dryer	#N/A	MDF, tube, indirect heated, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT	Acetaldehyde, Formaldehyde, Methanol, Phenol, MIBK
MDF	30700930	Pressurized Refiner/Primary Tube Dryer: Indirect-heated: Blowline Blend: Non-Urea Formaldehyde Resin: Hardwood	Primary tube dryer	#N/A	MDF, tube, indirect heated, blowline blend, UF, hardwood	AP-42, Ch 10.6.3	lb/ODT	Acetaldehyde Formaldehyde
MDF	30700932	Pressurized Refiner/Primary Tube Dryer: Indirect-heated: Blowline Blend: Urea Formaldehyde Resin: Softwood	Primary tube dryer	MDF, tube, indirect heated, blowline blend, UF, softwood	MDF, tube, indirect heated, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT	Acetaldehyde, Formaldehyde, Methanol, Phenol, MIBK



PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
MDF	30700934	Pressurized Refiner/Primary Tube Dryer: Indirect-heated: Blowline Blend: Non-Urea Formaldehyde Resin: Mixed Softwood/Hardwood	Primary tube dryer	#N/A	MDF, tube, indirect heated, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT	Acetaldehyde, Formaldehyde, Methanol, Phenol, MIBK
MDF	30700936	Pressurized Refiner/Primary Tube Dryer: Indirect-heated: Blowline Blend: Urea Formaldehyde Resin: Hardwood	Primary tube dryer	MDF, tube, indirect heated, blowline blend, UF, hardwood	MDF, tube, indirect heated, blowline blend, UF, hardwood	AP-42, Ch 10.6.3	lb/ODT	Acetaldehyde, Formaldehyde
MDF	30700939	Pressurized Refiner/Primary Tube Dryer: Indirect-heated: Blowline Blend: Urea Formaldehyde Resin: Mixed Softwood/Hardwood	Primary tube dryer	#N/A	MDF, tube, indirect heated, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT	Acetaldehyde, Formaldehyde, Methanol, Phenol, MIBK
MDF	30700942	Secondary Tube Dryer: All Indirect-fired Units	Secondary tube dryer	#N/A	MDF, second stage tube dryer, indirect heated, softwood	AP-42, Ch 10.6.3	lb/ODT	Acetaldehyde, Formaldehyde, Methanol, Benzene, Toluene
MDF	30700943	Secondary Tube Dryer: All Direct-fired Units	Secondary tube dryer	#N/A		No EF for SCC		
MDF	30700946	Fiber Dryers: Other	Other	#N/A		No EF for SCC		
MDF	30700947	Agriculture Fiber Rotary Dryer	Rotary agricultural fiber dryer	#N/A		No EF for SCC		
MDF	30700950	Reconstituted Wood Products Press: Continuous: Urea Formaldehyde Resin	Reconstituted wood product press	#N/A	MDF, press, UF resin	AP-42, Ch 10.6.3	lb/MSF 3/4	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, MIBK
MDF	30700951	Reconstituted Wood Products Press: Continuous: Non-Urea Formaldehyde Resin	Reconstituted wood product press	#N/A	MDF, press, UF resin	AP-42, Ch 10.6.3	lb/MSF 3/4	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, MIBK
MDF	30700960	Reconstituted Wood Products Press: Batch: Urea Formaldehyde Resin	Reconstituted wood product press	MDF, press, UF resin	MDF, press, UF resin	AP-42, Ch 10.6.3	lb/MSF 3/4	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, MIBK

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
MDF	30700961	Reconstituted Wood Products Press: Batch: Non-Urea Formaldehyde Resin	Reconstituted wood product press	#N/A	MDF, press, UF resin	AP-42, Ch 10.6.3	lb/MSF 3/4	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, MIBK
MDF	30700962	Agriculture Fiber Board Press	Agriculture fiber board press	#N/A		No EF for SCC		
MDF	30700971	Board Cooler: Urea Formaldehyde Resin	Reconstituted wood product board cooler	MDF board cooler, UF resin	MDF, board cooler, UF resin	AP-42, Ch 10.6.3	lb/MSF 3/4	Acetaldehyde, Acrolein, Formaldehyde, Methanol
MDF	30700972	Board Cooler: Non-Urea Formaldehyde Resin	Reconstituted wood product board cooler	#N/A	MDF, board cooler, UF resin	AP-42, Ch 10.6.3	lb/MSF 3/4	Acetaldehyde, Acrolein, Formaldehyde, Methanol
MDF	30700977	Former Without Blowline Blend: Non-Urea Formaldehyde Resin	Former	#N/A	MDF former without blowline blending, UF resin (includes blender emissions)	AP-42, Ch 10.6.3	lb/ODT	Formaldehyde, Methanol
MDF	30700978	Former With Blowline Blend: Non-Urea Formaldehyde Resin	Former	#N/A	MDF former without blowline blend, UF resin (includes blender emissions)	AP-42, Ch 10.6.3	lb/ODT	Formaldehyde, Methanol
MDF	30700979	Blender: Non-Urea Formaldehyde Resin	Blender	#N/A		No EF for SCC		
MDF	30700980	Blender: Urea Formaldehyde Resin	Blender	MDF paddle blender, UF resin	MDF paddle blender, UF resin	AP-42, Ch 10.6.3	lb/ODT	Formaldehyde, Methanol
MDF	30700981	Former Without Blowline Blend: Urea Formaldehyde Resin	Former	MDF former without blowline blend, UF resin (includes blender emissions)	MDF, former without blowline blending, UF resin (includes blender emissions)	AP-42, Ch 10.6.3	lb/ODT	Formaldehyde, Methanol
MDF	30700982	Former With Blowline Blend: Urea Formaldehyde Resin	Former	MDF former with blowline blend, UF resin	MDF, former with blowline blending, UF resin	AP-42, Ch 10.6.3	lb/ODT	Formaldehyde, Methanol
MDF	30700983	Sanding Operations: Urea Formaldehyde Resin	Finishing sander	MDF sander	MDF, sander	AP-42, Ch 10.6.3	lb/MSF	Formaldehyde, Methanol, Phenol, Styrene

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
MDF	30700984	Sawing Operations: Pre-Press: Urea Formaldehyde Resin	Finishing saw	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim	Methanol
MDF	30700985	Sanding Operations: Non-Urea Formaldehyde Resin	Finishing sander	#N/A	MDF sander	AP-42, Ch 10.6.3	lb/MSF	Formaldehyde, Methanol, Phenol, Styrene
MDF	30700986	Sawing Operations: Pre-Press: Non-Urea Formaldehyde Resin	Finishing saw	#N/A	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim	Methanol
MDF	30700987	Sawing Operations: Post-Board Cooler: Urea Formaldehyde Resin	Finishing saw	#N/A	MDF, saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim	Methanol
MDF	30700988	Sawing Operations: Post-Board Cooler: Non-Urea Formaldehyde Resin	Finishing saw	#N/A	MDF, saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim	Methanol
MDF	30700989	Sawing Operations: Post-Press: Pre-Board Cooler: Urea Formaldehyde Resin	Finishing saw	#N/A	MDF, saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim	Methanol
MDF	30700990	Sawing Operations: Post-Press: Pre-Board Cooler: Non-Urea Formaldehyde Resin	Finishing saw	#N/A	MDF, saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim	Methanol
MDF	30700991	Panel Trim Hammermill/Chipper	Panel trim chipper	#N/A	MDF, saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim	Methanol
MDF	30700994	Combined Process Unit Type Dust Collection: Dry Wood Material	Other	#N/A	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim	Methanol

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
MDF	30700995	Combined Process Unit Type Dust Collection: Mixed Dry and Green Wood Material	Other	#N/A	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim	Methanol
MDF	30700996	Resin Storage Tanks	Resin storage tank	#N/A		No EF for SCC		
MDF	30700997	Miscellaneous Coating Operations	Miscellaneous coating operation	#N/A		No EF for SCC		
MDF	30700999	Other Not Classified	Other	#N/A		No EF for SCC		
OSB	30701009	Rotary Strand Dryer: Direct Wood-fired: Softwood	Rotary strand dryer	OSB, rotary, direct wood-fired, softwood	OSB, rotary, direct wood-fired, softwood	AP-42, Ch 10.6.1	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, Benzene, Cumene, MIBK, Toluene, Xylenes, HAP metals
OSB	30701010	Rotary Strand Dryer: Direct Wood-fired: Hardwood	Rotary strand dryer	OSB, rotary, direct wood-fired, hardwood	OSB, rotary, direct wood-fired, hardwood	AP-42, Ch 10.6.1	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, Benzene, Styrene, Toluene, HAP metals
OSB	30701015	Rotary Strand Dryer: Direct Wood-fired: Mixed Softwood/Hardwood	Rotary strand dryer	OSB, rotary, direct wood-fired, mixed wood species (40-60% softwood, 40-60% hardwood)	OSB, rotary, direct wood-fired, mixed wood species (40-60% softwood, 40-60% hardwood)	AP-42, Ch 10.6.1	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Propionaldehyde, HAP metals
OSB	30701020	Rotary Strand Dryer: Direct Natural Gas-fired: Hardwood	Rotary strand dryer	OSB, rotary, direct natural gas-fired, hardwood	OSB, rotary, direct natural gas-fired, hardwood	AP-42, Ch 10.6.1	lb/ODT	Formaldehyde

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
OSB	30701021	Rotary Strand Dryer: Direct Natural Gas-fired: Softwood	Rotary strand dryer	#N/A	OSB, rotary, direct wood-fired, softwood	AP-42, Ch 10.6.1	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, Benzene, Cumene, MIBK, Toluene, Xylenes, HAP metals
OSB	30701022	Rotary Strand Dryer: Direct Natural Gas-fired: Mixed Softwood/Hardwood	Rotary strand dryer	#N/A	OSB, rotary, direct natural gas-fired, hardwood	AP-42, Ch 10.6.1	lb/ODT	Formaldehyde
OSB	30701030	Rotary Strand Dryer: Indirect-heated: Hardwood	Rotary strand dryer	OSB, rotary, indirect-heated, hardwood		No EF for SCC		
OSB	30701031	Rotary Strand Dryer: Indirect-heated: Softwood	Rotary strand dryer	#N/A	OSB, rotary, direct wood-fired, softwood	AP-42, Ch 10.6.1	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, Benzene, Cumene, MIBK, Toluene, Xylenes, HAP metals
OSB	30701032	Rotary Strand Dryer: Indirect-heated: Mixed Softwood/Hardwood	Rotary strand dryer	#N/A		No EF for SCC		
OSB	30701039	Indirect-heated Conveyor Dryer, Softwoods	Conveyor strand dryer	#N/A		No EF for SCC		
OSB	30701040	Conveyor Dryer: Heated Zones: Hardwood	Conveyor strand dryer	OSB, conveyer, indirect heated, hardwood (heated zones)	OSB, conveyer, indirect heated, hardwood (heated zones)	AP-42, Ch 10.6.1	lb/ODT	Formaldehyde
OSB	30701041	Conveyor Dryer: Heated Zones: Softwood	Conveyor strand dryer	#N/A	OSB, Conveyor dryer, indirect heated, heated zones, hardwood	AP-42, Ch 10.6.1	lb/ODT	Formaldehyde
OSB	30701042	Conveyor Dryer: Heated Zones: Mixed Hardwood/Softwood	Conveyor strand dryer	#N/A	OSB, conveyer, indirect heated, hardwood (heated zones)	AP-42, Ch 10.6.1	lb/ODT	Formaldehyde
OSB	30701043	Conveyor Dryer: Unheated Zones: All Species	Conveyor strand dryer	#N/A		No EF for SCC		
OSB	30701053	Reconstituted Wood Products Press: Phenol Formaldehyde Resin	Reconstituted wood product press	OSB, press, PF resin	OSB, hot press, PF resin (liquid)	AP-42, Ch 10.6.1	lb/MSF 3/8	Acetaldehyde Formaldehyde-Methanol, Phenol
OSB	30701055	Reconstituted Wood Products Press: Methylene Diphenyl Diisocyanate (MDI) Resin	Reconstituted wood product press	OSB, press, MDI resin	OSB, press, MDI resin	AP-42, Ch 10.6.1	lb/MSF 3/8	Formaldehyde, MDI

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
OSB	30701057	Reconstituted Wood Products Press: Phenol Formaldehyde Resin (surface layers)/ Methylene Diphenyl Diisocyanate (MDI) Resin (core layers)	Reconstituted wood product press	OSB, press, PF/MDI resin	OSB, press, PF/MDI resin	AP-42, Ch 10.6.1	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol, Phenol, MDI
OSB	30701058	Reconstituted Wood Products Press	Reconstituted wood product press	#N/A	OSB, hot press, PF resin (powder)	AP-42, Ch 10.6.1	lb/MSF 3/8	Formaldehyde
OSB	30701062	Sanding Operations	Finishing sander	OSB sanderdust metering bin (holds fuel for dryer and thermal oil heater suspension burners)	OSB sanderdust metering bin (holds fuel for dryer and thermal oil heater suspension burners)	AP-42, Ch 10.6.1	lb/MSF 3/8	Methanol
OSB	30701064	Storage Bins: Trimming and Dryer Exhaust Cyclone Dust	Other	OSB raw fuel bin (holds fines from screens and saws)	OSB raw fuel bin (holds fines from screens and saws)	AP-42, Ch 10.6.1	lb/MSF 3/8	Formaldehyde, Methanol
OSB	30701067	Combined Process Unit Type Dust Collection: Dry Wood Material	Other	#N/A	OSB sanderdust metering bin (holds fuel for dryer and thermal oil heater suspension burners)	AP-42, Ch 10.6.1	lb/MSF 3/8	Methanol
OSB	30701068	Combined Process Unit Type Dust Collection: Mixed Dry and Green Wood Material	Other	#N/A	OSB sanderdust metering bin (holds fuel for dryer and thermal oil heater suspension burners)	AP-42, Ch 10.6.1	lb/MSF 3/8	Methanol
OSB	30701070	Blender: Phenol Formaldehyde Resin	Blender	#N/A	OSB blender (PF & MDI resin)	AP-42, Ch 10.6.1	lb/MSF 3/8	Formaldehyde, Methanol
OSB	30701071	Blender: Methylene Diphenyl Diisocyanate (MDI) Resin	Blender	#N/A	OSB blender (PF & MDI resin)	AP-42, Ch 10.6.1	lb/MSF 3/8	Formaldehyde, Methanol
OSB	30701072	Former: Phenol Formaldehyde Resin	Former	#N/A		No EF for SCC		
OSB	30701073	Former Operations: Methylene Diphenyl Diisocyanate (MDI) Resin	Former	#N/A		No EF for SCC		
OSB	30701074	Former Operations: Phenol Formaldehyde Resin/Methylene Diphenyl Diisocyanate (MDI) Resin	Former	#N/A		No EF for SCC		

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
OSB	30701084	Hammermill/Chipper: Dry Wood Material	Panel trim chipper	#N/A	SPW dry trim chipper (chips dry trim from SPW panel saws; process rate = finished board production)	AP-42, Ch 10.5	lb/MSF 3/8	Methanol
OSB	30701085	Hammermill/Chipper: Mixed Green and Dry Wood Material	Panel trim chipper	#N/A	SPW dry trim chipper (chips dry trim from SPW panel saws; process rate = finished board production)	AP-42, Ch 10.5	lb/MSF 3/8	Methanol
OSB	30701086	Miscellaneous Coating Operations	Miscellaneous coating operation	#N/A		No EF for SCC		
OSB	30701087	Resin Storage Tanks	Resin storage tank	#N/A		No EF for SCC		
OSB	30701090	Sawing Operations: Pre-Press Mat Trimming: Phenol Formaldehyde Resin	Finishing saw	#N/A	OSB raw fuel bin (holds fines from screens and saws)	AP-42, Ch 10.6.1	lb/MSF 3/8	Formaldehyde, Methanol
OSB	30701091	Sawing Operations: Pre-Press Mat Trimming: Methylene Diphenyl Diisocyanate (MDI) Resin	Finishing saw	#N/A	OSB raw fuel bin (holds fines from screens and saws)	AP-42, Ch 10.6.1	lb/MSF 3/8	Formaldehyde, Methanol
OSB	30701092	Sawing Operations: Pre-Press Mat Trimming: Phenol Formaldehyde Resin/Methylene Diphenyl Diisocyanate (MDI) Resin	Finishing saw	#N/A	OSB raw fuel bin (holds fines from screens and saws)	AP-42, Ch 10.6.1	lb/MSF 3/8	Formaldehyde, Methanol
OSB	30701093	Sawing Operations: Post-Press Panel Trimming: Phenol Formaldehyde Resin	Finishing saw	#N/A	OSB raw fuel bin (holds fines from screens and saws)	AP-42, Ch 10.6.1	lb/MSF 3/8	Formaldehyde, Methanol
OSB	30701094	Sawing Operations: Post-Press Panel Trimming: Methylene Diphenyl Diisocyanate (MDI) Resin	Finishing saw	#N/A	OSB raw fuel bin (holds fines from screens and saws)	AP-42, Ch 10.6.1	lb/MSF 3/8	Formaldehyde, Methanol
OSB	30701095	Sawing Operations: Post-Press Panel Trimming: Phenol Formaldehyde Resin/Methylene Diphenyl Diisocyanate (MDI) Resin	Finishing saw	#N/A	OSB raw fuel bin (holds fines from screens and saws)	AP-42, Ch 10.6.1	lb/MSF 3/8	Formaldehyde, Methanol
OSB	30701099	Other Not Classified	Other	#N/A		No EF for SCC		

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
HB	30701401	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Non-Phenol Formaldehyde Resin: Hardwood	Primary tube dryer	#N/A	HB, tube, direct wood-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Formaldehyde, Methanol, Phenol, HAP metals
HB	30701402	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Non-Phenol Formaldehyde Resin: Softwood	Primary tube dryer	#N/A	HB, tube, direct wood-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Formaldehyde, Methanol, Phenol, HAP metals
HB	30701403	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Non-Phenol Formaldehyde Resin: Mixed Softwood/Hardwood	Primary tube dryer	#N/A	HB, tube, direct wood-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Formaldehyde, Methanol, Phenol, HAP metals
HB	30701404	Pressurized Refiner/Primary Tube Dryer: Natural Gas-fired: Blowline Blend: Non-Phenol Formaldehyde Resin: Hardwood	Primary tube dryer	#N/A	HB, tube, direct natural gas-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, Benzene, MIBK, Styrene, Toluene, Xylenes
HB	30701405	Pressurized Refiner/Primary Tube Dryer: Natural Gas-fired: Blowline Blend: Non-Phenol Formaldehyde Resin: Softwood	Primary tube dryer	#N/A	HB, tube, direct natural gas-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, Benzene, MIBK, Styrene, Toluene, Xylenes
HB	30701406	Pressurized Refiner/Primary Tube Dryer: Natural Gas-fired: Blowline Blend: Non-Phenol Formaldehyde Resin: Mixed Softwood/Hardwood	Primary tube dryer	#N/A	HB, tube, direct natural gas-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, Benzene, MIBK, Styrene, Toluene, Xylenes
HB	30701407	Pressurized Refiner/Primary Tube Dryer: Indirect-fired: Blowline Blend: Phenol Formaldehyde Resin: Softwood	Primary tube dryer	#N/A	HB, tube, direct natural gas-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, Benzene, MIBK, Styrene, Toluene, Xylenes



PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
HB	30701408	Pressurized Refiner/Primary Tube Dryer: Indirect-fired: Blowline Blend: Phenol Formaldehyde Resin: Hardwood	Primary tube dryer	#N/A	HB, tube, direct natural gas-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, Benzene, MIBK, Styrene, Toluene, Xylenes
HB	30701409	Pressurized Refiner/Primary Tube Dryer: Indirect-fired: Blowline Blend: Phenol Formaldehyde Resin: Mixed Softwood/Hardwood	Primary tube dryer	#N/A	HB, tube, direct natural gas-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, Benzene, MIBK, Styrene, Toluene, Xylenes
HB	30701410	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Phenol Formaldehyde Resin: Hardwood	Primary tube dryer	HB, tube, direct wood-fired, blowline blend, PF, hardwood	HB, tube, direct wood-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Formaldehyde, Methanol, Phenol, HAP metals
HB	30701411	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Phenol Formaldehyde Resin: Softwood	Primary tube dryer	#N/A	HB, tube, direct wood-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Formaldehyde, Methanol, Phenol, HAP metals
HB	30701412	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Phenol Formaldehyde Resin: Mixed Softwood/Hardwood	Primary tube dryer	#N/A	HB, tube, direct wood-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Formaldehyde, Methanol, Phenol, HAP metals
HB	30701413	Pressurized Refiner/Primary Tube Dryer: Natural Gas-fired: Blowline Blend: Phenol Formaldehyde Resin: Softwood	Primary tube dryer	#N/A	HB, tube, direct natural gas-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, Benzene, Chloromethane (methyl chloride), Ethylbenzene, Styrene, Toluene, Xylenes

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
HB	30701414	Pressurized Refiner/Primary Tube Dryer: Natural Gas-fired: Blowline Blend: Phenol Formaldehyde Resin: Mixed Softwood/Hardwood	Primary tube dryer	#N/A	HB, tube, direct natural gas-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, Benzene, Chloromethane (methyl chloride), Ethylbenzene, Styrene, Toluene, Xylenes
HB	30701415	Pressurized Refiner/Primary Tube Dryer: Natural Gas-fired: Blowline Blend: Phenol Formaldehyde Resin: Hardwood	Primary tube dryer	HB, tube, direct natural gas-fired, blowline blend, PF, hardwood	HB, tube, direct natural gas-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, Benzene, Chloromethane (methyl chloride), Ethylbenzene, Styrene, Toluene, Xylenes
HB	30701417	Pressurized Refiner/Primary Tube Dryer: Indirect-fired: Blowline Blend: Non-Phenol Formaldehyde Resin: Hardwood	Primary tube dryer	#N/A	HB, tube, direct natural gas-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, Benzene, Chloromethane (methyl chloride), Ethylbenzene, Styrene, Toluene, Xylenes
HB	30701418	Pressurized Refiner/Primary Tube Dryer: Indirect-fired: Blowline Blend: Non-Phenol Formaldehyde Resin: Softwood	Primary tube dryer	#N/A	HB, tube, direct natural gas-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, Benzene, Chloromethane (methyl chloride), Ethylbenzene, Styrene, Toluene, Xylenes
HB	30701419	Pressurized Refiner/Primary Tube Dryer: Indirect-fired: Blowline Blend: Non-Phenol Formaldehyde Resin: Mixed Softwood/Hardwood	Primary tube dryer	#N/A	HB, tube, direct natural gas-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, Benzene, Chloromethane (methyl chloride), Ethylbenzene, Styrene, Toluene, Xylenes
HB	30701421	HB Oven	HB oven	#N/A	HB, tempering oven, direct natural gas-fired, hardwood	AP-42, Ch 10.6.4	lb/MSF 1/8	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, MIBK
HB	30701423	Secondary Tube Dryer: All Direct-fired Units	Secondary tube dryer	#N/A	HB, second stage tube dryer, indirect heated, hardwood	AP-42, Ch 10.6.4	lb/ODT	Formaldehyde, Methanol, Phenol

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
HB	30701424	Secondary Tube Dryer: All Indirect-fired Units	Secondary tube dryer	#N/A	HB, second stage tube dryer, indirect heated, hardwood	AP-42, Ch 10.6.4	lb/ODT	Formaldehyde, Methanol, Phenol
HB	30701426	Fiber Dryers: Other	Other	#N/A		No EF for SCC		
HB	30701427	Press Pre-Dryer: Phenol Formaldehyde Resin	HB press predryer	#N/A	FB, board dryer, indirect heated, softwood, starch binder (heated zones)	AP-42, Ch 10.6.4	lb/MSF 1/2	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde
HB	30701428	Press Pre-Dryer: Non-Phenol Formaldehyde Resin	HB press predryer	#N/A	HB, board dryer, direct natural gas-fired, softwood, linseed oil binder (heated zones)	AP-42, Ch 10.6.4	lb/MSF 1/2	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, Benzene, MIBK, Styrene, Toluene
HB	30701431	Humidifier	HB humidifier	#N/A	HB, humidification kiln, indirect heated	AP-42, Ch 10.6.4	lb/MSF 1/8	Acetaldehyde, Acrolein, Formaldehyde, Phenol, Propionaldehyde, Benzene, Chloroethane (Ethyl chloride), Chloromethane (methyl chloride), Ethylbenzene, Toluene, Xylenes, Cresols
HB	30701441	Dry HB Press: Phenol Formaldehyde Resin	Reconstituted wood product press	#N/A	HB, press, PF resin	AP-42, Ch 10.6.4	lb/MSF 1/8	Acetaldehyde, Formaldehyde, Methanol, Phenol, Toluene, Xylenes
HB	30701443	Dry HB Press: Non-Phenol Formaldehyde Resin	Reconstituted wood product press	#N/A	HB, press, linseed oil binder	AP-42, Ch 10.6.4	lb/MSF 1/8	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde
HB	30701444	Wet HB Press: Phenol Formaldehyde Resin	Reconstituted wood product press	#N/A	HB, press, PF resin	AP-42, Ch 10.6.4	lb/MSF 1/8	Acetaldehyde, Formaldehyde, Methanol, Phenol, Toluene, Xylenes
HB	30701445	Wet HB Press: Non-Phenol Formaldehyde Resin	Reconstituted wood product press	#N/A	HB, press, PF resin	AP-42, Ch 10.6.4	lb/MSF 1/8	Acetaldehyde, Formaldehyde, Methanol, Phenol, Toluene, Xylenes
HB	30701450	Blender: Phenol Formaldehyde Resin	Blender	#N/A	OSB, blender (PF & MDI)	AP-42, Ch 10.6.1	lb/MSF 3/8	Formaldehyde, Methanol
HB	30701451	Blender: Non-Phenol Formaldehyde Resin	Blender	#N/A		No EF for SCC		
HB	30701452	Fiber Washer	Fiber washer	#N/A	FB, washer, softwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Formaldehyde, Methanol
HB	30701455	Digester: Softwood	Stand alone digester	#N/A	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, MIBK, Styrene

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
HB	30701456	Digester: Hardwood	Stand alone digester	#N/A	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, MIBK, Styrene
HB	30701457	Digester: Mixed Softwood/Hardwood	Stand alone digester	#N/A	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, MIBK, Styrene
HB	30701460	Atmospheric Refiner: Softwood	Atmospheric refiner	#N/A	FB, atmospheric refiner and dump chest, softwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Propionaldehyde, Cumene, Toluene
HB	30701461	Atmospheric Refiner: Hardwood	Atmospheric refiner	#N/A	FB, atmospheric refiner and dump chest, softwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Propionaldehyde, Cumene, Toluene
HB	30701462	Atmospheric Refiner: Mixed Softwood/Hardwood	Atmospheric refiner	#N/A	FB, atmospheric refiner and dump chest, softwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Propionaldehyde, Cumene, Toluene
HB	30701463	Pressurized Refiner: Softwood	Pressurized refiner	#N/A	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, MIBK, Styrene
HB	30701464	Pressurized Refiner: Hardwood	Pressurized refiner	#N/A	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, MIBK, Styrene
HB	30701465	Pressurized Refiner: Mixed Softwood/Hardwood	Pressurized refiner	#N/A	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, MIBK, Styrene
HB	30701466	Pressurized Digester/Refiner: Softwood	Pressurized refiner	#N/A	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, MIBK, Styrene
HB	30701467	Pressurized Digester/Refiner: Hardwood	Pressurized refiner	#N/A	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, MIBK, Styrene

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
HB	30701468	Pressurized Digester/Refiner: Mixed Softwood/Hardwood	Pressurized refiner	#N/A	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, MIBK, Styrene
HB	30701480	Sanding Operations	Finishing sander	HB Sander	OSB sanderdust metering bin (holds fuel for dryer and thermal oil heater suspension burners)	AP-42, Ch 10.6.1	lb/MSF 3/8	Methanol
HB	30701481	Sawing Operations	Finishing saw	#N/A	OSB raw fuel bin (holds fines from screens and saws)	AP-42, Ch 10.6.1	lb/MSF 3/8	Formaldehyde, Methanol
HB	30701485	Wet HB Former: Vacuum System: Non-Phenol Formaldehyde Resin	Former	#N/A	HB former, wet, PF resin	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Formaldehyde, Methanol-Phenol, Propionaldehyde, MIBK
HB	30701486	Wet HB Former: Vacuum System: Phenol Formaldehyde Resin	Former	HB former, wet, PF resin	HB former, wet, PF resin	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Formaldehyde, Methanol-Phenol, Propionaldehyde, MIBK
HB	30701487	Dry Process Former Operations: Dust Collection: Phenol Formaldehyde Resin	Former	#N/A		No EF for SCC		
HB	30701488	Dry Process Former Operations: Dust Collection: Non-Phenol Formaldehyde Resin	Former	#N/A		No EF for SCC		
HB	30701489	Wet Process Former Operations: Dust (Fiber) Collection: Phenol Formaldehyde Resin	Former	#N/A		No EF for SCC		
HB	30701490	Wet Process Former Operations: Dust (Fiber) Collection: Non-Phenol Formaldehyde Resin	Former	#N/A		No EF for SCC		
HB	30701493	Combined Process Unit Type Dust Collection: Dry Wood Material	Other	#N/A		No EF for SCC		
HB	30701494	Combined Process Unit Type Dust Collection: Mixed Dry and Green Wood Material	Other	#N/A		No EF for SCC		
HB	30701495	Panel Trim Chipper	Panel trim chipper	#N/A	OSB raw fuel bin (holds fines from screens and saws)	AP-42, Ch 10.6.1	lb/MSF 3/8	Formaldehyde, Methanol
HB	30701496	Miscellaneous Coating Operations	Miscellaneous coating operation	#N/A		No EF for SCC		

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
HB	30701497	Resin Storage Tanks	Resin storage tank	#N/A		No EF for SCC		
HB	30701499	Other Not Classified	Other	#N/A		No EF for SCC		
FB	30701513	Mat Dryer: Indirect-heated: Starch binder: Softwood	Fiberboard mat dryer	#N/A	FB, board dryer, indirect heated, softwood, starch binder (heated zones)	AP-42, Ch 10.6.4	lb/MSF 1/2	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde
FB	30701514	Mat Dryer: Indirect-heated: Starch binder: Hardwood	Fiberboard mat dryer	#N/A	FB, board dryer, indirect heated, softwood, starch binder (heated zones)	AP-42, Ch 10.6.4	lb/MSF 1/2	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde
FB	30701515	Mat Dryer: Indirect-heated: Starch binder: Mixed Softwood/Hardwood	Fiberboard mat dryer	#N/A	FB, board dryer, indirect heated, softwood, starch binder (heated zones)	AP-42, Ch 10.6.4	lb/MSF 1/2	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde
FB	30701516	Mat Dryer: Indirect-heated: Asphalt binder: Softwood	Fiberboard mat dryer	#N/A	FB, board dryer, indirect heated, softwood, 6-12% asphalt binder (heated zones)	AP-42, Ch 10.6.4	lb/MSF 1/2	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol
FB	30701517	Mat Dryer: Indirect-heated: Asphalt binder: Hardwood	Fiberboard mat dryer	#N/A	FB, board dryer, indirect heated, softwood, 6-12% asphalt binder (heated zones)	AP-42, Ch 10.6.4	lb/MSF 1/2	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol
FB	30701518	Mat Dryer: Indirect-heated: Asphalt binder: Mixed Softwood/Hardwood	Fiberboard mat dryer	#N/A	FB, board dryer, indirect heated, softwood, 6-12% asphalt binder (heated zones)	AP-42, Ch 10.6.4	lb/MSF 1/2	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol
FB	30701519	Mat Dryer: Direct-heated: Starch binder: Softwood	Fiberboard mat dryer	#N/A	Fiberboard board dryer, indirect heated, starch binder (heated zones), softwood	AP-42, Ch 10.6.4	lb/MSF 1/2	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde
FB	30701520	Mat Dryer: Direct-heated: Starch binder: Hardwood	Fiberboard mat dryer	#N/A	Fiberboard, board dryer, indirect heated, starch binder (heated zones), softwood	AP-42, Ch 10.6.4	lb/MSF 1/2	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde
FB	30701521	Mat Dryer: Direct-heated: Starch binder: Mixed Softwood/Hardwood	Fiberboard mat dryer	#N/A	Fiberboard, board dryer, indirect heated, starch binder (heated zones), softwood	AP-42, Ch 10.6.4	lb/MSF 1/2	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
FB	30701522	Mat Dryer: Direct-heated: Asphalt binder: Softwood	Fiberboard mat dryer	#N/A	Fiberboard, board dryer, indirect heated, 6-12% asphalt binder (heated zones), softwood	AP-42, Ch 10.6.4	lb/MSF 1/2	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol
FB	30701523	Mat Dryer: Direct-heated: Asphalt binder: Hardwood	Fiberboard mat dryer	#N/A	Fiberboard, board dryer, indirect heated, 6-12% asphalt binder (heated zones), softwood	AP-42, Ch 10.6.4	lb/MSF 1/2	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol
FB	30701524	Mat Dryer: Direct-heated: Asphalt binder: Mixed Softwood/Hardwood	Fiberboard mat dryer	#N/A	Fiberboard, board dryer, indirect heated, 6-12% asphalt binder (heated zones), softwood	AP-42, Ch 10.6.4	lb/MSF 1/2	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol
FB	30701528	Atmospheric Refiner: Hardwood	Atmospheric refiner	#N/A	FB, atmospheric refiner and dump chest, softwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Propionaldehyde, Cumene, Toluene
FB	30701529	Atmospheric Refiner: Mixed Softwood/Hardwood	Atmospheric refiner	#N/A	FB, atmospheric refiner and dump chest, softwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Propionaldehyde, Cumene, Toluene
FB	30701530	Atmospheric Refiner: Softwood	Atmospheric refiner	FB, atmospheric refiner and dump chest, softwood	FB, atmospheric refiner and dump chest, softwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Propionaldehyde, Cumene, Toluene
FB	30701531	Pressurized Refiner: Softwood	Pressurized refiner	#N/A	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, MIBK, Styrene
FB	30701532	Pressurized Refiner: Hardwood	Pressurized refiner	#N/A	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, MIBK, Styrene
FB	30701533	Pressurized Refiner: Mixed Softwood/Hardwood	Pressurized refiner	#N/A	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, MIBK, Styrene
FB	30701534	Digester: Softwood	Stand alone digester	#N/A	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, MIBK, Styrene

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
FB	30701535	Digester: Hardwood	Stand alone digester	#N/A	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, MIBK, Styrene
FB	30701536	Digester: Mixed Softwood/Hardwood	Stand alone digester	#N/A	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, MIBK, Styrene
FB	30701537	Pressurized Digester/Refiner: Softwood	Pressurized refiner	#N/A	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, MIBK, Styrene
FB	30701538	Pressurized Digester/Refiner: Hardwood	Pressurized refiner	#N/A	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, MIBK, Styrene
FB	30701539	Pressurized Digester/Refiner: Mixed Softwood/Hardwood	Pressurized refiner	#N/A	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, MIBK, Styrene
FB	30701540	Fiber Washer: Softwood	Fiber washer	FB, washer, softwood	FB, washer, softwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde Formaldehyde-Methanol
FB	30701541	Fiber Washer: Hardwood	Fiber washer	#N/A	FB, washer, softwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde Formaldehyde-Methanol
FB	30701542	Fiber Washer: Mixed Softwood/Hardwood	Fiber washer	#N/A	FB, washer, softwood	AP-42, Ch 10.6.4	lb/ODT	Acetaldehyde Formaldehyde-Methanol
FB	30701551	Wet Fiberboard Former: Vacuum: All Binder Systems	Former	#N/A	FB, former, wet, 6-12% asphalt	AP-42, Ch 10.6.4	lb/MSF 1/2	Acetaldehyde, Formaldehyde, Methanol, Toluene
FB	30701561	Panel Trim Chipper	Panel trim chipper	#N/A	OSB raw fuel bin (holds fines from screens and saws)	AP-42, Ch 10.6.1	lb/MSF 3/8	Formaldehyde, Methanol
FB	30701562	Sawing Operations	Finishing saw	#N/A	OSB raw fuel bin (holds fines from screens and saws)	AP-42, Ch 10.6.1	lb/MSF 3/8	Formaldehyde, Methanol
FB	30701567	Combined Process Unit Type Dust Collection: Dry Wood Material	Other	#N/A		No EF for SCC		
FB	30701568	Combined Process Unit Type Dust Collection: Mixed Dry and Green Wood Material	Other	#N/A		No EF for SCC		
FB	30701591	Miscellaneous Coating Operations	Miscellaneous coating operation	#N/A		No EF for SCC		
FB	30701592	Resin Storage Tanks	Resin storage tank	#N/A		No EF for SCC		



PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
FB	30701599	Other Not Classified	Other	#N/A		No EF for SCC		
LVL	30701601	Hardwood Veneer Dryer: Indirect-heated: Heated Zones	Hardwood veneer dryer	LVL, veneer, indirect heated, hardwood (heated zones)	HPW, veneer, indirect heated, hardwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol, Phenol, MIBK
LVL	30701602	Hardwood Veneer Dryer: Indirect-heated: Cooling Section	Hardwood veneer dryer	LVL, veneer, indirect heated, hardwood (cooling section)	HPW, veneer, indirect heated, hardwood (cooling section)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol, MIBK
LVL	30701603	Softwood Veneer Dryer: Indirect-heated: Heated Zones	Softwood veneer dryer	#N/A	SPW, veneer, indirect heated, softwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol, Phenol, MIBK, Benzene, Acetaldehyde, Acrolein, Formaldehyde-Methanol-Phenol-Propionaldehyde, Benzene, MIBK, Toluene, Xylenes
LVL	30701604	Softwood Veneer Dryer: Indirect-heated: Cooling Section	Softwood veneer dryer	#N/A	SPW, veneer, indirect heated, softwood (cooling section)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol, Phenol, MIBK, Xylenes
LVL	30701605	Hardwood Veneer Dryer: Direct Wood-fired: Heated Zones	Hardwood veneer dryer	#N/A	HPW, veneer, direct wood-fired, hardwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol, HAP metals
LVL	30701606	Hardwood Veneer Dryer: Direct Wood-fired: Cooling Section	Hardwood veneer dryer	#N/A	HPW, veneer, direct wood-fired, hardwood (cooling section)	AP-42, Ch 10.5 (All EF BDL)		
LVL	30701607	Softwood Veneer Dryer: Direct Wood-fired: Heated Zones	Softwood veneer dryer	#N/A	SPW, veneer, direct wood-fired, softwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	Formaldehyde
LVL	30701608	Softwood Veneer Dryer: Direct Wood-fired: Cooling Section	Softwood veneer dryer	#N/A	SPW, veneer, direct natural gas-fired, softwood (cooling section)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol, Phenol
LVL	30701609	Hardwood Veneer Dryer: Direct Natural Gas-fired: Heated Zones	Hardwood veneer dryer	#N/A	HPW, veneer, direct wood-fired, hardwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol, HAP metals

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
LVL	30701610	Hardwood Veneer Dryer: Direct Natural Gas-fired: Cooling Section	Hardwood veneer dryer	#N/A	HPW, veneer, direct wood-fired, hardwood (cooling section)	AP-42, Ch 10.5 (All EF BDL)		
LVL	30701611	Softwood Veneer Dryer: Direct Natural Gas-fired: Heated Zones	Softwood veneer dryer	#N/A	SPW, veneer, direct natural gas-fired, softwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Acrolein Formaldehyde, Methanol, Phenol, Propionaldehyde, Benzene, MIBK, Styrene, Toluene, Xylenes, HAP Metals
LVL	30701612	Press: Phenol Formaldehyde Resin	Engineered wood products press	LVL, press, PF resin	LVL, press, PF resin	AP-42, Ch 10.9	lb/MCF	Acetaldehyde, Formaldehyde, Methanol, Propionaldehyde
LVL	30701613	Softwood Veneer Dryer: Direct Natural Gas-fired: Cooling Section	Softwood veneer dryer	#N/A	SPW, veneer, direct natural gas-fired, softwood (cooling section)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol, Phenol
LVL	30701614	Press: Non-Phenol Formaldehyde Resin	Engineered wood products press	#N/A	LSL Hot press, MDI resin	AP-42, Ch 10.9	lb/MCF	Formaldehyde, MDI
LVL	30701615	Veneer Redryer: Radio Frequency-heated: Softwood	Veneer redryer	#N/A	SPW, veneer, RF heated, softwood	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol
LVL	30701616	Veneer Redryer: Radio Frequency-heated: Hardwood	Veneer redryer	#N/A	SPW, veneer, RF heated, softwood	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol
LVL	30701617	Veneer Redryer: Non-RF Heat: Softwood	Veneer redryer	#N/A		No EF for SCC		
LVL	30701618	Veneer Redryer: Non-RF Heat: Hardwood	Veneer redryer	#N/A		No EF for SCC		
LVL	30701619	Sanding Operations	Finishing sander	#N/A	OSB sanderdust metering bin (holds fuel for dryer and thermal oil heater suspension burners)	AP-42, Ch 10.6.1	lb/MSF 3/8	Methanol
LVL	30701623	Hammermill/Chipper: Dry Wood Material	Panel trim chipper	#N/A		No EF for SCC		
LVL	30701624	Hammermill/Chipper: Mixed Green and Dry Wood Material	Panel trim chipper	#N/A		No EF for SCC		
LVL	30701627	Sawing Operations: Dry Veneer and Laminated Veneer Lumber (LVL) Trimming	Finishing saw	#N/A		No EF for SCC		

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
LVL	30701628	Log Steaming Vat	Log vat	#N/A	SPW log steaming vat (process rate = volume of wood removed from vat per hour)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Methanol
LVL	30701629	Resin Storage Tanks	Resin storage tank	#N/A		No EF for SCC		
LVL	30701633	Combined Process Unit Type Dust Collection: Dry Wood Material	Other	#N/A		No EF for SCC		
LVL	30701634	Combined Process Unit Type Dust Collection: Mixed Dry and Green Wood Material	Other	#N/A		No EF for SCC		
LVL	30701635	Miscellaneous Coating Operations	Miscellaneous coating operation	#N/A		No EF for SCC		
LVL	30701639	Other Not Classified	Other	#N/A		No EF for SCC		
I-joist	30701670	Curing Chamber	Engineered wood products press	#N/A	I-Joist curing chamber	AP-42, Ch 10.9	lb/MLF	Formaldehyde, Methanol
I-joist	30701671	Resin Storage Tanks	Resin storage tank	#N/A		No EF for SCC		
I-joist	30701672	Sawing Operations	Finishing saw	#N/A	LVL I-Beam Saw	AP-42, Ch 10.9	lb/MLF	Methanol
I-joist	30701679	Other Not Classified	Other	#N/A		No EF for SCC		
glulam	30701680	Press/Curing Chamber: Phenol-Resorcinol-Formaldehyde (PRF) resin	Engineered wood products press	#N/A		No EF for SCC		
glulam	30701681	Press/Curing Chamber: Non-Phenol-Resorcinol-Formaldehyde (PRF) Resin	Engineered wood products press	#N/A		No EF for SCC		
glulam	30701682	Resin Storage Tanks	Resin storage tank	#N/A		No EF for SCC		
glulam	30701683	Chippers	Other	#N/A		No EF for SCC		
glulam	30701684	Sanding Operations	Finishing sander	#N/A		No EF for SCC		
glulam	30701685	Sawing Operations	Finishing saw	#N/A		No EF for SCC		

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
glulam	30701689	Other Not Classified	Other	#N/A		No EF for SCC		
LSL	30701701	Rotary Strand Dryer: Direct Wood-fired: Hardwood	Rotary strand dryer	#N/A	LSL, rotary, direct wood-fired, hardwood	AP-42, Ch 10.9	lb/ODT	Acrolein, Formaldehyde, HAP metals
LSL	30701702	Rotary Strand Dryer: Direct Wood-fired: Softwood	Rotary strand dryer	#N/A	OSB, rotary, direct wood-fired, softwood	AP-42, Ch 10.9	lb/ODT	Acrolein, Formaldehyde, HAP metals
LSL	30701703	Rotary Strand Dryer: Direct Wood-fired: Mixed Softwood/Hardwood	Rotary strand dryer	#N/A	OSB, rotary, direct wood-fired, softwood	AP-42, Ch 10.9	lb/ODT	Acrolein, Formaldehyde, HAP metals
LSL	30701704	Rotary Strand Dryer: Direct Natural Gas-fired: Softwood	Rotary strand dryer	#N/A	OSB, rotary, direct wood-fired, softwood	AP-42, Ch 10.9	lb/ODT	Acrolein, Formaldehyde
LSL	30701705	Rotary Strand Dryer: Direct Natural Gas-fired: Hardwood	Rotary strand dryer	#N/A	OSB, rotary, direct natural gas-fired, hardwood	AP-42, Ch 10.9	lb/ODT	Acrolein, Formaldehyde
LSL	30701706	Rotary Strand Dryer: Direct Natural Gas-fired: Mixed Softwood/Hardwood	Rotary strand dryer	#N/A	OSB, rotary, direct natural gas-fired, hardwood	AP-42, Ch 10.9	lb/ODT	Acrolein, Formaldehyde
LSL	30701707	Rotary Strand Dryer: Indirect-heated: Softwood	Rotary strand dryer	#N/A	OSB, rotary, direct wood-fired, softwood	AP-42, Ch 10.9	lb/ODT	Acrolein, Formaldehyde

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
LSL	30701708	Rotary Strand Dryer: Indirect-heated: Hardwood	Rotary strand dryer	#N/A	OSB, rotary, indirect-heated, hardwood	AP-42, Ch 10.9	lb/ODT	Acrolein, Formaldehyde
LSL	30701709	Rotary Strand Dryer: Indirect-heated: Mixed Softwood/Hardwood	Rotary strand dryer	#N/A	OSB, rotary, indirect-heated, hardwood	AP-42, Ch 10.9	lb/ODT	Acrolein, Formaldehyde
LSL	30701710	Conveyor Dryer: Heated Zones: Hardwood	Conveyor strand dryer	#N/A	OSB, conveyer, indirect heated, hardwood (heated zones)	AP-42, Ch 10.9 (All EF BDL)		
LSL	30701711	Conveyor Dryer: Heated Zones: Softwood	Conveyor strand dryer	#N/A	LSL conveyor dryer, indirect-heated, hardwood	AP-42, Ch 10.9 (All EF BDL)		
LSL	30701712	Conveyor Dryer: Heated Zones: Mixed Hardwood/Softwood	Conveyor strand dryer	#N/A	LSL conveyor dryer, indirect-heated, hardwood	AP-42, Ch 10.9 (All EF BDL)		
LSL	30701713	Conveyor Dryer: Unheated Zones: All Species	Conveyor strand dryer	#N/A	LSL conveyor dryer, indirect-heated, hardwood	AP-42, Ch 10.9 (All EF BDL)		
LSL	30701720	Press: Methylene Diphenyl Diisocyanate (MDI) Adhesive	Engineered wood products press	#N/A	LSL Hot press, MDI resin	AP-42, Ch 10.9	lb/MCF	Formaldehyde, MDI
LSL	30701721	Press: Non-Methylene Diphenyl Diisocyanate (MDI) Adhesive	Engineered wood products press	#N/A	LVL, Hot press, PF resin	AP-42, Ch 10.9	lb/MCF	Acetaldehyde, Formaldehyde, Methanol, Propionaldehyde
LSL	30701722	Blender: Methylene Diphenyl Diisocyanate (MDI) Adhesive	Blender	#N/A	OSB blender (PF & MDI resin)	AP-42, Ch 10.6.1	lb/MSF 3/8	Formaldehyde, Methanol
LSL	30701723	Blender: Non-Methylene Diphenyl Diisocyanate (MDI) Adhesive	Blender	#N/A	OSB blender (PF & MDI resin)	AP-42, Ch 10.6.1	lb/MSF 3/8	Formaldehyde, Methanol
LSL	30701724	Former Operations: Methylene Diphenyl Diisocyanate (MDI) Adhesive	Former	#N/A		No EF for SCC		
LSL	30701725	Former Operations: Non-Methylene Diphenyl Diisocyanate (MDI) Adhesive	Former	#N/A		No EF for SCC		
LSL	30701730	Sanding Operations	Finishing sander	#N/A	OSB sanderdust metering bin (holds fuel for dryer and thermal oil heater suspension burners)	AP-42, Ch 10.6.1	lb/MSF 3/8	Methanol

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
LSL	30701731	Sawing Operations	Finishing saw	#N/A		No EF for SCC		
LSL	30701735	Hammermill/Chipper: Dry Wood Material	Panel trim chipper	#N/A		No EF for SCC		
LSL	30701736	Hammermill/Chipper: Mixed Green and Dry Wood Material	Panel trim chipper	#N/A		No EF for SCC		
LSL	30701737	Resin Storage Tanks	Resin storage tank	#N/A		No EF for SCC		
LSL	30701739	Other Not Classified	Other	#N/A		No EF for SCC		
PSL	30701740	Hardwood Veneer Dryer: Indirect-heated: Heated Zones	Hardwood veneer dryer	#N/A	HPW, veneer, indirect heated, hardwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol, Phenol, MIBK
PSL	30701741	Hardwood Veneer Dryer: Indirect-heated: Cooling Section	Hardwood veneer dryer	#N/A	HPW, Indirect heated, cooling section, hardwood	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol, MIBK
PSL	30701742	Softwood Veneer Dryer: Indirect-heated: Heated Zones	Softwood veneer dryer	#N/A	SPW, Indirect heated, heated zones, softwood	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Acrolein, Formaldehyde, Methanol, Phenol, Propionaldehyde, MIBK, Benzene, Toluene, Xylenes
PSL	30701743	Softwood Veneer Dryer: Indirect-heated: Cooling Section	Softwood veneer dryer	#N/A	SPW, veneer, indirect heated, softwood (cooling section)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol, Phenol, MIBK, Xylenes
PSL	30701744	Hardwood Veneer Dryer: Direct Wood-fired: Heated Zones	Hardwood veneer dryer	#N/A	HPW, veneer, direct wood-fired, hardwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol, HAP metals
PSL	30701745	Hardwood Veneer Dryer: Direct Wood-fired: Cooling Section	Hardwood veneer dryer	#N/A	HPW, veneer, direct wood-fired, hardwood (cooling section)	AP-42, Ch 10.5 (All EF BDL)		

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
PSL	30701746	Softwood Veneer Dryer: Direct Wood-fired: Heated Zones	Softwood veneer dryer	#N/A	SPW, veneer, direct wood-fired, softwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Acrolein Formaldehyde, Methanol, Phenol, Propionaldehyde, Benzene, MIBK, Styrene, Toluene, Xylenes, HAP Metals
PSL	30701747	Softwood Veneer Dryer: Direct Wood-fired: Cooling Section	Softwood veneer dryer	#N/A	SPW, veneer, direct natural gas-fired, softwood (cooling section)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol, Phenol
PSL	30701748	Hardwood Veneer Dryer: Direct Natural Gas-fired: Heated Zones	Hardwood veneer dryer	#N/A	HPW, veneer, direct wood-fired, hardwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol, HAP metals
PSL	30701749	Hardwood Veneer Dryer: Direct Natural Gas-fired: Cooling Section	Hardwood veneer dryer	#N/A	HPW, veneer, direct wood-fired, hardwood (cooling section)	AP-42, Ch 10.5 (All EF BDL)		
PSL	30701750	Softwood Veneer Dryer: Direct Natural Gas-fired: Heated Zones	Softwood veneer dryer	#N/A	SPW, veneer, direct natural gas-fired, softwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Acrolein Formaldehyde, Methanol, Phenol, Propionaldehyde, Benzene, MIBK, Styrene, Toluene, Xylenes, HAP Metals
PSL	30701751	Softwood Veneer Dryer: Direct Natural Gas-fired: Cooling Section	Softwood veneer dryer	#N/A	SPW, veneer, direct natural gas-fired, softwood (cooling section)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol, Phenol
PSL	30701752	Veneer Redryer: Radio Frequency-heated: Hardwood	Veneer redryer	#N/A	SPW, veneer, RF heated, softwood	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol
PSL	30701753	Veneer Redryer: Radio Frequency-heated: Softwood	Veneer redryer	#N/A	SPW, veneer, RF heated, softwood	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Formaldehyde, Methanol
PSL	30701754	Veneer Redryer: Other: Hardwood	Veneer redryer	#N/A		No EF for SCC		
PSL	30701755	Veneer Redryer: Other: Softwood	Veneer redryer	#N/A		No EF for SCC		
PSL	30701760	Press: Phenol Formaldehyde Resin	Engineered wood products press	#N/A	LVL, press, PF resin	AP-42, Ch 10.9	lb/MCF	Acetaldehyde, Formaldehyde, Methanol, Propionaldehyde
PSL	30701761	Press: Non-Phenol Formaldehyde Resin	Engineered wood products press	#N/A	LSL Hot press, MDI resin	AP-42, Ch 10.9	lb/ODT	Formaldehyde, MDI

PCWP SCCs by Products and Process Unit Type				Provisional calculation information				
PCWP <sup>1</sup>	SCC	SCC Level Four	ICR Process Unit Type	Emission Factor Grouping (AP-42) exact SCC match	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Pollutants with Provisional Calculations Available <sup>2</sup>
PSL	30701765	Hammermill/Chipper: Dry Wood Material	Panel trim chipper	#N/A	SPW dry trim chipper (chips dry trim from SPW panel saws; process rate = finished board production)	AP-42, Ch 10.5	lb/MSF 3/8	Methanol
PSL	30701766	Hammermill/Chipper: Mixed Green and Dry Wood Material	Panel trim chipper	#N/A	SPW dry trim chipper (chips dry trim from SPW panel saws; process rate = finished board production)	AP-42, Ch 10.5	lb/MSF 3/8	Methanol
PSL	30701767	Sanding Operations	Finishing sander	#N/A	OSB sanderdust metering bin (holds fuel for dryer and thermal oil heater suspension burners)	AP-42, Ch 10.6.1	lb/MSF 3/8	Methanol
PSL	30701769	Sawing Operations: Dry Veneer and Parallel Strand Lumber (PSL) Trimming	Finishing saw	#N/A		No EF for SCC		
PSL	30701772	Combined Process Unit Type Dust Collection: Dry Wood Material	Other	#N/A		No EF for SCC		
PSL	30701773	Combined Process Unit Type Dust Collection: Mixed Dry and Green Wood Material	Other	#N/A		No EF for SCC		
PSL	30701774	Log Steaming Vat	Log vat	#N/A	SPW log steaming vat (process rate = volume of wood removed from vat per hour)	AP-42, Ch 10.5	lb/MSF 3/8	Acetaldehyde, Methanol
PSL	30701776	Resin Storage Tanks	Resin storage tank	#N/A		No EF for SCC		
PSL	30701777	Miscellaneous Coating Operations	Miscellaneous coating operation	#N/A		No EF for SCC		
PSL	30701779	Other Not Classified	Other	#N/A		No EF for SCC		

1. Abbreviations: PB=Particleboard; MDF=Medium Density Fiberboard; OSB=Oriented Strand Board; HB=Hardboard; FB=Fiberboard; LVL=Laminate Veneer Lumber; LSL=Laminated Strand Lumber; PSL=Parallel Strand Lumber

2. Pollutants with publicly-available emission factors for the SCC are listed. The organic HAP emissions factors are from AP-42, while the HAP metal emission factors were derived using fuel analysis data for wood-firing. In some cases, no emission factor is available even though the pollutant may reasonably be expected to be emitted. Facilities with more-representative emissions data for their operations should use that data as opposed to the provisional calculations.



HAP Metals: Antimony, Arsenic, Beryllium, Cadmium, Chromium, Cobalt, Lead, Manganese, Mercury, Nickel, Selenium, Chromium III, Chromium VI, Elemental Gaseous Mercury, Gaseous Divalent Mercury, and Particulate Divalent Mercury.

MIBK is also known as 4-Methyl-2-Pentanone.

## Appendix C. List of HAP Compounds Included in the PCWP ICR HAP Menu

Pollutants	Type
Acetaldehyde	organic
Acrolein	organic
Formaldehyde	organic
Methanol	organic
Phenol	organic
Propionaldehyde	organic
1,1,1-Trichloroethane (methyl chloroform)	organic
Acetophenone	organic
Benzene	organic
Biphenyl	organic
Bis-(2-ethylhexyl phthalate)	organic
Bromomethane (methyl bromide)	organic
Carbon disulfide	organic
Carbon tetrachloride	organic
Chloroethane (Ethyl chloride)	organic
Chloroform	organic
Chloromethane (methyl chloride)	organic
Cresols	organic
Cumene	organic
Di-N-butyl phthalate	organic
Ethylbenzene	organic
Hydroquinone	organic
MDI	organic
Methylene chloride	organic
MIBK (4-Methyl-2-Pentanone)	organic
n-Hexane	organic
Styrene	organic
Toluene	organic
Xylenes	organic
Antimony	metal
Arsenic	metal
Beryllium	metal
Cadmium	metal
Chromium	metal
Cobalt	metal
Lead	metal
Manganese	metal
Mercury	metal

Nickel	metal
Selenium	metal
Chromium III*	metal
Chromium VI*	metal
Elemental Gaseous Mercury*	metal
Gaseous Divalent Mercury*	metal
Particulate Divalent Mercury*	metal

\*Default speciations of chromium and mercury are included in the provisional calculations.

## Appendix D. Provisional Calculation Scalars

Appendix D contains conversion factors used to ratio the supplied throughput unit of measure (UOM) with the provisional calculation emission factor selection based on the SCC code.

Combination of Throughput and EF UOM	Scalar	Scalar_UOM
MBF/yr -- lb/MBF	1	Unity
MCF/yr -- lb/MCF	1	Unity
MLF/yr -- lb/MLF	1	Unity
MSF/yr -- lb/MSF	1	Unity
MSF/yr 1/2" -- lb/MSF 1/2"	1	Unity
MSF/yr 1/8" -- lb/MSF 1/8"	1	Unity
MSF/yr 3/4" -- lb/MSF 3/4"	1	Unity
MSF/yr 3/8" -- lb/MSF 3/8"	1	Unity
MSF/yr -- lb/MSF reclaim	1	Unity
ODT/yr -- lb/ODT	1	Unity
MSF/yr 1/8" -- lb/MSF	1	Unity*
MSF/yr 3/8" -- lb/MSF	1	Unity*
MSF/yr 1/2" -- lb/MSF	1	Unity*
MSF/yr 3/4" -- lb/MSF	1	Unity*
MSF/yr 1/8" -- lb/MSF reclaim	1	Unity*
MSF/yr 3/8" -- lb/MSF reclaim	1	Unity*
MSF/yr 1/2" -- lb/MSF reclaim	1	Unity*
MSF/yr 3/4" -- lb/MSF reclaim	1	Unity*
MSF/yr 1/2" -- lb/MSF 1/8"	0.25	(MSF 1/8")/(MSF 1/2")
MSF/yr 1/2" -- lb/MSF 3/4"	1.5	(MSF 3/4")/(MSF 1/2")
MSF/yr 1/2" -- lb/MSF 3/8"	0.75	(MSF 3/8")/(MSF 1/2")
MSF/yr 1/8" -- lb/MSF 1/2"	4	(MSF 1/2")/(MSF 1/8")
MSF/yr 1/8" -- lb/MSF 3/4"	6	(MSF 3/4")/(MSF 1/8")
MSF/yr 1/8" -- lb/MSF 3/8"	3	(MSF 3/8")/(MSF 1/8")
MSF/yr 3/4" -- lb/MSF 1/2"	0.667	(MSF 1/2")/(MSF 3/4")
MSF/yr 3/4" -- lb/MSF 1/8"	0.167	(MSF 1/8")/(MSF 3/4")
MSF/yr 3/4" -- lb/MSF 3/8"	0.5	(MSF 3/8")/(MSF 3/4")
MSF/yr 3/8" -- lb/MSF 1/2"	1.33	(MSF 1/2")/(MSF 3/8")
MSF/yr 3/8" -- lb/MSF 1/8"	0.333	(MSF 1/8")/(MSF 3/8")
MSF/yr 3/8" -- lb/MSF 3/4"	2	(MSF 3/4")/(MSF 3/8")
MCF/yr lb -- MSF 1/8"	95.97	(MSF 1/8")/(MCF)
MCF/yr lb -- MSF 3/8"	32	(MSF 3/8")/(MCF)
MCF/yr lb -- MSF 1/2"	24	(MSF 1/2")/(MCF)
MCF/yr lb -- MSF 3/4"	16	(MSF 3/4")/(MCF)

<b>Combination of Throughput and EF UOM</b>	<b>Scalar</b>	<b>Scalar_UOM</b>
MSF/yr 1/8" -- lb/MCF	0.0104	(MCF)/(MSF 1/8")
MSF/yr 3/8" -- lb/MCF	0.0313	(MCF)/(MSF 3/8")
MSF/yr 1/2" -- lb/MCF	0.0417	(MCF)/(MSF 1/2")
MSF/yr 3/4" -- lb/MCF	0.0625	(MCF)/(MSF 3/4")
MSF/yr 1/8" -- lb/ODT	0.213	(ODT)/(MSF 1/8")**
MSF/yr 3/8" -- lb/ODT	0.639	(ODT)/(MSF 3/8")**
MSF/yr 1/2" -- lb/ODT	0.852	(ODT)/(MSF 1/2")**
MSF/yr 3/4" -- lb/ODT	1.8	(ODT)/(MSF 3/4")**
MCF/yr -- lb/ODT	20.4	(ODT)/(MCF)**
MBF/yr -- lb/ODT	1.695	(ODT)/(MBF)**

\* Product sawing, sanding, and handling throughput with width dimensions used with dimensionless emission factor.

\*\* Denotes engineering estimate necessary for unit conversion between volume and mass. Assumes an average wood product density of 43.3 lb/cu.-ft. at 6% moisture content (for fiberboard, hardboard, and particleboard).

## **Appendix E. Numeric Emission Factors Included in Provisional Calculations**

Appendix E. Numerical Emission Factors Included in Provisional Calculations

PCWP	SCC	SCC Level Four	ICR Process Unit Type	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Acetaldehyde	Acrolein	Formaldehyde	Methanol	Phenol	Propion aldehyde
PB	30700635	Dry Rotary Dryer: Indirect-heated: <600F Inlet air, <30%MC: Softwood	Dry rotary dryer	PB, rotary, indirect heated with auxiliary natural gas, softwood	AP-42, Ch 10.6.2	lb/ODT			0.047	0.027		
PB	30700636	Dry Rotary Dryer: Indirect-heated: <600F Inlet air, <30%MC: Hardwood	Dry rotary dryer	PB, rotary, indirect heated with auxiliary natural gas, softwood	AP-42, Ch 10.6.2	lb/ODT			0.047	0.027		
PB	30700637	Dry Rotary Dryer: Indirect-heated: <600F Inlet air, <30%MC: Mixed Softwood/Hardwood	Dry rotary dryer	PB, rotary, indirect heated with auxiliary natural gas, softwood	AP-42, Ch 10.6.2	lb/ODT			0.047	0.027		
PB	30700641	Former Operations: Urea Formaldehyde Resin	Former	MDF former without blowline blend, UF resin (includes blender emissions)	AP-42, Ch 10.6.3	lb/ODT			0.06	0.41		
PB	30700642	Former Operations: Non-Urea Formaldehyde Resin	Former	MDF former without blowline blend, UF resin (includes blender emissions)	AP-42, Ch 10.6.3	lb/ODT			0.06	0.41		
PB	30700648	Blender: Urea Formaldehyde Resin	Blender	MDF paddle blender, UF resin	AP-42, Ch 10.6.3	lb/ODT			0.01	0.48		
PB	30700649	Blender: Non-Urea Formaldehyde Resin	Blender	MDF paddle blender, UF resin	AP-42, Ch 10.6.3	lb/ODT			0.01	0.48		
PB	30700651	Reconstituted Wood Products Press: Batch: Urea Formaldehyde Resin	Reconstituted wood product press	PB, press, UF resin	AP-42, Ch 10.6.2	lb/MSF 3/4	0.011	0.0054	0.23	0.59	0.011	
PB	30700652	Reconstituted Wood Products Press: Continuous: Urea	Reconstituted wood product press	PB, press, UF resin	AP-42, Ch 10.6.2	lb/MSF 3/4	0.011	0.0054	0.23	0.59	0.011	
PB	30700653	Reconstituted Wood Products Press: Continuous: Non-Urea Formaldehyde Resin	Reconstituted wood product press	PB, press, UF resin	AP-42, Ch 10.6.2	lb/MSF 3/4	0.011	0.0054	0.23	0.59	0.011	
PB	30700654	Reconstituted Wood Products Press: Batch: Non-Urea Formaldehyde Resin	Reconstituted wood product press	PB, press, UF resin	AP-42, Ch 10.6.2	lb/MSF 3/4	0.011	0.0054	0.23	0.59	0.011	
PB	30700656	Agriculture Fiber Board Press	Agriculture fiber board press									
PB	30700657	Flaker: Hardwood	Other	PB flaker/refiner/hammermill	AP-42, Ch 10.6.2	lb/ODT				0.0073	0.0045	
PB	30700658	Flaker: Softwood	Other	PB flaker/refiner/hammermill	AP-42, Ch 10.6.2	lb/ODT				0.0073	0.0045	
PB	30700660	Board Cooler: Non-Urea Formaldehyde Resin	Reconstituted wood product board cooler	PB board cooler, UF resin	AP-42, Ch 10.6.2	lb/MSF 3/4	0.0036	0.00036	0.015	0.081	0.0066	
PB	30700661	Board Cooler: Urea Formaldehyde Resin	Reconstituted wood product board cooler	PB board cooler, UF resin	AP-42, Ch 10.6.2	lb/MSF 3/4	0.0036	0.00036	0.015	0.081	0.0066	
PB	30700662	Refiner: Green Wood Material: Hardwood	Atmospheric refiner	PB flaker/refiner/hammermill	AP-42, Ch 10.6.2	lb/ODT				0.0073	0.0045	
PB	30700663	Refiner: Dry Wood Materials	Atmospheric refiner	PB flaker/refiner/hammermill	AP-42, Ch 10.6.2	lb/ODT				0.0073	0.0045	
PB	30700664	Refiner: Green Wood Material: Softwood	Atmospheric refiner	PB flaker/refiner/hammermill	AP-42, Ch 10.6.2	lb/ODT				0.0073	0.0045	
PB	30700665	Sanding Operations	Finishing sander	PB sander	AP-42, Ch 10.6.2	lb/MSF				0.013	0.015	
PB	30700666	Refiner: Mixed Dry and Green Wood Material	Atmospheric refiner	PB flaker/refiner/hammermill	AP-42, Ch 10.6.2	lb/ODT				0.0073	0.0045	

PCWP	SCC	SCC Level Four	ICR Process Unit Type	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Acetaldehyde	Acrolein	Formaldehyde	Methanol	Phenol	Propion aldehyde
PB	30700667	Sanding Operations: Urea Formaldehyde Resin	Finishing sander	PB sander	AP-42, Ch 10.6.2	lb/MSF				0.013	0.015	
PB	30700668	Sanding Operations: Non-Urea Formaldehyde Resin	Finishing sander	PB sander	AP-42, Ch 10.6.2	lb/MSF				0.013	0.015	
PB	30700670	Dry Rotary Dryer: Direct Wood-fired: <600F Inlet air, <30%MC: Hardwood	Dry rotary dryer	Particleboard, Rotary dryer, direct wood-fired, softwood	AP-42, Ch 10.6.2	lb/ODT	0.013	0.0045	0.025	0.014	0.0066	0.0032
PB	30700671	Dry Rotary Dryer: Direct Wood-fired: <600F Inlet air, <30%MC: Softwood	Dry rotary dryer	Particleboard, Rotary dryer, direct wood-fired, softwood	AP-42, Ch 10.6.2	lb/ODT	0.013	0.0045	0.025	0.014	0.0066	0.0032
PB	30700672	Dry Rotary Dryer: Direct Wood-fired: <600F Inlet air, <30%MC: Mixed Softwood/Hardwood	Dry rotary dryer	Particleboard, Rotary dryer, direct wood-fired, softwood	AP-42, Ch 10.6.2	lb/ODT	0.013	0.0045	0.025	0.014	0.0066	0.0032
PB	30700673	Dry Rotary Dryer: Direct Natural Gas-fired: <600F Inlet air, <30%MC: Hardwood	Dry rotary dryer	Particleboard, Rotary dryer, direct natural gas-fired, hardwood	AP-42, Ch 10.6.2	lb/ODT			0.028			
PB	30700674	Dry Rotary Dryer: Direct Natural Gas-fired: <600F Inlet air, <30%MC: Softwood	Dry rotary dryer	Particleboard, Rotary dryer, direct natural gas-fired, softwood	AP-42, Ch 10.6.2	lb/ODT			0.0086	0.073		
PB	30700675	Dry Rotary Dryer: Direct Natural Gas-fired: <600F Inlet air, <30%MC: Mixed Softwood/Hardwood	Dry rotary dryer	Particleboard, Rotary dryer, direct natural gas-fired, softwood	AP-42, Ch 10.6.2	lb/ODT			0.0086	0.073		
PB	30700676	Green Rotary Dryer: Direct Wood-fired: Hardwood	Green rotary dryer	PB, green dryer, rotary, direct wood-fired, mixed wood species (40-60% softwood, 40-60% hardwood)	AP-42, Ch 10.6.2	lb/ODT	0.059	0.015	0.096	0.059	0.0079	0.0042
PB	30700677	Green Rotary Dryer: Direct Wood-fired: Softwood	Green rotary dryer	PB, green dryer, rotary, direct wood-fired, softwood	AP-42, Ch 10.6.2	lb/ODT	0.075	0.023	0.14	0.11	0.028	0.013
PB	30700678	Green Rotary Dryer: Direct Wood-fired: Mixed Softwood/Hardwood	Green rotary dryer	PB, green dryer, rotary, direct wood-fired, mixed wood species (40-60% softwood, 40-60% hardwood)	AP-42, Ch 10.6.2	lb/ODT	0.059	0.015	0.096	0.059	0.0079	0.0042
PB	30700679	Green Rotary Dryer: Direct Natural Gas-fired: Hardwood	Green rotary dryer	PB, green dryer, rotary, direct natural gas-fired, softwood	AP-42, Ch 10.6.2	lb/ODT			0.0042			
PB	30700680	Green Rotary Dryer: Direct Natural Gas-fired: Softwood	Green rotary dryer	PB, green dryer, rotary, direct natural gas-fired, softwood	AP-42, Ch 10.6.2	lb/ODT			0.0042			
PB	30700681	Green Rotary Dryer: Direct Natural Gas-fired: Mixed Softwood/Hardwood	Green rotary dryer	PB, green dryer, rotary, direct natural gas-fired, softwood	AP-42, Ch 10.6.2	lb/ODT			0.0042			
PB	30700682	Green Rotary Dryer: Indirect-heated: Hardwood	Green rotary dryer	Particleboard, Rotary dryer, indirect heated with auxiliary natural gas, softwood	AP-42, Ch 10.6.2	lb/ODT			0.047	0.027		
PB	30700683	Green Rotary Dryer: Indirect-heated: Softwood	Green rotary dryer	Particleboard, Rotary dryer, indirect heated with auxiliary natural gas, softwood	AP-42, Ch 10.6.2	lb/ODT			0.047	0.027		
PB	30700684	Green Rotary Dryer: Indirect-heated: Mixed Softwood/Hardwood	Green rotary dryer	Particleboard, Rotary dryer, indirect heated with auxiliary natural gas, softwood	AP-42, Ch 10.6.2	lb/ODT			0.047	0.027		



PCWP	SCC	SCC Level Four	ICR Process Unit Type	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Acetaldehyde	Acrolein	Formaldehyde	Methanol	Phenol	Propion aldehyde
PB	30700685	Agriculture Fiber Rotary Dryer	Rotary agricultural fiber dryer		No EF for SCC							
PB	30700686	Panel Trim Hammermill/Chipper	Panel trim chipper	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim				0.38		
PB	30700687	Sawing Operations: Pre-Press: Urea Formaldehyde Resin	Finishing saw	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim				0.38		
PB	30700688	Sawing Operations: Pre-Press: Non-Urea Formaldehyde Resin	Finishing saw	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim				0.38		
PB	30700689	Sawing Operations: Post-Press: Pre-Board Cooler: Urea Formaldehyde Resin	Finishing saw	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim				0.38		
PB	30700690	Sawing Operations: Post-Press: Pre-Board Cooler: Non-Urea Formaldehyde Resin	Finishing saw	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim				0.38		
PB	30700691	Sawing Operations: Post-Board Cooler: Urea Formaldehyde Resin	Finishing saw	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim				0.38		
PB	30700692	Sawing Operations: Post-Board Cooler: Non-Urea Formaldehyde Resin	Finishing saw	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim				0.38		
PB	30700695	Combined Process Unit Type Dust Collection: Dry Wood Material	Other	PB flaker/refiner/hammermill	AP-42, Ch 10.6.2	lb/ODT				0.0073	0.0045	
PB	30700696	Combined Process Unit Type Dust Collection: Mixed Dry and Green	Other	PB flaker/refiner/hammermill	AP-42, Ch 10.6.2	lb/ODT				0.0073	0.0045	
PB	30700697	Resin Storage Tanks	Resin storage tank		No EF for SCC							
PB	30700698	Miscellaneous Coating Operations	Miscellaneous coating operation	None	No EF for SCC							
PB	30700699	Other Not Classified	Other		No EF for SCC							
plywood	30700702	Sanding Operations	Finishing sander	SPW sander (8-drum sander, 1-drum sander, & specialty saw)	AP-42, Ch 10.5	lb/MSF 3/8	0.0028		0.0018	0.012		
plywood	30700710	Sawing Operations: Dry Veneer and Plywood Trimming	Finishing saw	Softwood plywood, saws (including 3 saws, hog, and sander)	AP-42, Ch 10.5	lb/MSF 3/8	0.00092		0.00034	0.012		
plywood	30700720	Veneer Redryer: Steam-heated	Veneer redryer	Radio frequency heated redryer, softwood	AP-42, Ch 10.5	lb/MSF 3/8	0.0015		0.00035	0.0027		
plywood	30700727	Veneer Laying and Glue Spreading	Other		No EF for SCC							
plywood	30700731	Log Steaming Vat	Log vat	SPW log steaming vat (process rate = volume of wood removed from vat per hour)	AP-42, Ch 10.5	lb/MSF 3/8	0.0047			0.0073		
plywood	30700732	Resin Storage Tanks	Resin storage tank		No EF for SCC							
plywood	30700734	Hardwood Veneer Dryer: Direct Wood-fired: Heated Zones	Hardwood veneer dryer	HPW, veneer, direct wood-fired, hardwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	0.0052		0.0025	0.0095		

PCWP	SCC	SCC Level Four	ICR Process Unit Type	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Acetaldehyde	Acrolein	Formaldehyde	Methanol	Phenol	Propion aldehyde
plywood	30700735	Hardwood Veneer Dryer: Direct Wood-fired: Cooling Section	Hardwood veneer dryer	HPW, veneer, direct wood-fired, hardwood (cooling section)	AP-42, CH 10.5 (All EF BDL)							
plywood	30700736	Softwood Veneer Dryer: Direct Wood-fired: Heated Zones	Softwood veneer dryer	SPW, veneer, direct wood-fired, softwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8			0.045			
plywood	30700737	Softwood Veneer Dryer: Direct Wood-fired: Cooling Section	Softwood veneer dryer	SPW, veneer, direct natural gas-fired, softwood (cooling section)	AP-42, Ch 10.5	lb/MSF 3/8	0.0034		0.0015	0.0057	0.01	
plywood	30700752	Softwood Veneer Dryer: Direct Natural Gas-fired: Heated Zones	Softwood veneer dryer	SPW, veneer, direct natural gas-fired, softwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	0.062	0.009	0.064	0.036	0.006	0.0016
plywood	30700753	Softwood Veneer Dryer: Direct Natural Gas-fired: Cooling Section	Softwood veneer dryer	SPW, veneer, direct natural gas-fired, softwood (cooling section)	AP-42, Ch 10.5	lb/MSF 3/8	0.0034		0.0015	0.0057	0.01	
plywood	30700754	Hardwood Veneer Dryer: Direct Natural Gas-fired: Heated Zones	Hardwood veneer dryer	HPW, veneer, direct wood-fired, hardwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	0.0052		0.0025	0.0095		
plywood	30700755	Hardwood Veneer Dryer: Direct Natural Gas-fired: Cooling Section	Hardwood veneer dryer	HPW, veneer, direct wood-fired, hardwood (cooling section)	AP-42, CH 10.5 (All EF BDL)							
plywood	30700756	Hardwood Veneer Dryer: Indirect-heated: Heated Zones	Hardwood veneer dryer	HPW, veneer, indirect heated, hardwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	0.0043		0.0011	0.041	0.003	
plywood	30700757	Hardwood Veneer Dryer: Indirect-heated: Cooling Section	Hardwood veneer dryer	HPW, veneer, indirect heated, hardwood (cooling section)	AP-42, Ch 10.5	lb/MSF 3/8	0.032		0.0065	0.021		
plywood	30700762	Softwood Veneer Dryer: Indirect-heated: Heated Zones	Softwood veneer dryer	SPW, veneer, indirect heated, softwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	0.017	0.0013	0.014	0.039	0.0034	0.0024
plywood	30700763	Softwood Veneer Dryer: Indirect-heated: Cooling Section	Softwood veneer dryer	SPW, veneer, indirect heated, softwood (cooling section)	AP-42, Ch 10.5	lb/MSF 3/8	0.0046		0.0013	0.01	0.0062	
plywood	30700770	Veneer Redryer: Radio Frequency-heated: Hardwood	Veneer redryer	SPW, veneer, RF heated, softwood	AP-42, Ch 10.5	lb/MSF 3/8	0.0015		0.00035	0.0027		
plywood	30700771	Veneer Redryer: Radio Frequency-heated: Softwood	Veneer redryer	SPW, veneer, RF heated, softwood	AP-42, Ch 10.5	lb/MSF 3/8	0.0015		0.00035	0.0027		
plywood	30700773	Board Cooler	Other		No EF for SCC							
plywood	30700777	Combined Process Unit Type Dust Collection: Dry Wood Material	Other	SPW skinner & equalizer saws (3 saws, hog, and sander)	AP-42, Ch 10.5	lb/MSF 3/8	0.00092		0.00034	0.012		
plywood	30700778	Combined Process Unit Type Dust Collection: Mixed Dry and Green	Other	SPW skinner & equalizer saws (3 saws, hog, and sander)	AP-42, Ch 10.5	lb/MSF 3/8	0.00092		0.00034	0.012		
plywood	30700782	Press: Non-Phenol Formaldehyde Resin: Softwood	Softwood plywood press	Softwood Plywood, press, PF resin	AP-42, Ch 10.5	lb/MSF 3/8	0.0042		0.0019	0.14	0.0014	
plywood	30700783	Press: Phenol Formaldehyde Resin:	Softwood plywood press	Softwood Plywood, press, PF resin	AP-42, Ch 10.5	lb/MSF 3/8	0.0042		0.0019	0.14	0.0014	

PCWP	SCC	SCC Level Four	ICR Process Unit Type	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Acetaldehyde	Acrolein	Formaldehyde	Methanol	Phenol	Propion aldehyde
plywood	30700784	Press: Non-Urea Formaldehyde Resin: Hardwood	Hardwood plywood press		No EF for SCC							
plywood	30700785	Press: Urea Formaldehyde Resin: Hardwood	Hardwood plywood press	Hardwood Plywood, press, UF resin	AP-42, Ch 10.5	lb/MSF 3/8			0.0047	0.032	0.011	
plywood	30700791	Hammermill/Chipper: Dry Wood Material	Panel trim chipper	SPW dry trim chipper (chips dry trim from SPW panel saws; process rate = finished board production)	AP-42, Ch 10.5	lb/MSF 3/8				0.0078		
plywood	30700794	Miscellaneous Coating Operations	Miscellaneous coating operation		No EF for SCC							
plywood	30700799	Other Not Classified	Other		No EF for SCC							
lumber	30700841	Lumber Kiln: Indirect-heated: Softwood: Pine Species	Lumber kiln		NCASI 2014	lb/MBF	0.04	0.004	0.016	0.18	0.01	0.004
lumber	30700842	Lumber Kiln: Indirect-heated: Softwood: Non-Pine Species	Lumber kiln		NCASI 2014	lb/MBF	0.04	0.004	0.016	0.18	0.01	0.004
lumber	30700843	Lumber Kiln: Indirect-heated: Hardwood	Lumber kiln		NCASI 2014	lb/MBF	0.04	0.004	0.016	0.18	0.01	0.004
lumber	30700844	Lumber Kiln: Direct-fired: Softwood: Pine Species	Lumber kiln		NCASI 2014	lb/MBF	0.04	0.004	0.065	0.18	0.01	0.004
lumber	30700845	Lumber Kiln: Direct-fired: Softwood: Non-Pine Species	Lumber kiln		NCASI 2014	lb/MBF	0.04	0.004	0.065	0.18	0.01	0.004
lumber	30700846	Lumber Kiln: Direct-fired: Hardwood	Lumber kiln		NCASI 2014	lb/MBF	0.04	0.004	0.065	0.18	0.01	0.004
MDF	30700909	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Blowline Blend: Non-Urea Formaldehyde Resin:	Primary tube dryer	MDF, tube, direct wood-fired, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT			0.86			
MDF	30700910	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Blowline Blend: Non-Urea Formaldehyde Resin:	Primary tube dryer	MDF, tube, direct wood-fired, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT			0.86			
MDF	30700911	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Blowline Blend: Non-Urea Formaldehyde Resin: Mixed	Primary tube dryer	MDF, tube, direct wood-fired, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT			0.86			
MDF	30700912	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Blowline Blend: Urea Formaldehyde Resin:	Primary tube dryer	MDF, tube, direct wood-fired, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT			0.86			

PCWP	SCC	SCC Level Four	ICR Process Unit Type	Related AP-42 EF to use in absense of more represtnative data	EF source	EF units	Acetaldehyde	Acrolein	Formaldehyde	Methanol	Phenol	Propion aldehyde
MDF	30700913	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Blowline Blend: Urea Formaldehyde Resin:	Primary tube dryer	MDF, tube, direct wood-fired, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT			0.86			
MDF	30700914	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Blowline Blend: Urea Formaldehyde Resin:	Primary tube dryer	MDF, tube, direct wood-fired, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT			0.86			
MDF	30700915	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Non-Blowline Blend:	Primary tube dryer	MDF, tube, direct wood-fired, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT			0.86			
MDF	30700916	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Non-Blowline Blend:	Primary tube dryer	MDF, Tube dryer, direct natural gas-fired, non-blowline blend, hardwood	AP-42, Ch 10.6.3	lb/ODT			0.0085	0.96		
MDF	30700917	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Non-Blowline Blend: Mixed	Primary tube dryer	MDF, Tube dryer, direct natural gas-fired, non-blowline blend, hardwood	AP-42, Ch 10.6.3	lb/ODT			0.0085	0.96		
MDF	30700918	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Non-Urea Formaldehyde Resin:	Primary tube dryer	MDF, tube, direct wood-fired, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT			0.86			
MDF	30700919	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Non-Urea Formaldehyde Resin:	Primary tube dryer	MDF, tube, direct wood-fired, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT			0.86			
MDF	30700920	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Non-Urea Formaldehyde Resin:	Primary tube dryer	MDF, tube, direct wood-fired, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT			0.86			
MDF	30700923	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Urea Formaldehyde Resin:	Primary tube dryer	MDF, tube, direct wood-fired, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT			0.86			
MDF	30700924	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Urea Formaldehyde Resin:	Primary tube dryer	MDF, tube, direct wood-fired, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT			0.86			
MDF	30700925	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Urea Formaldehyde Resin:	Primary tube dryer	MDF, tube, direct wood-fired, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT			0.86			

PCWP	SCC	SCC Level Four	ICR Process Unit Type	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Acetaldehyde	Acrolein	Formaldehyde	Methanol	Phenol	Propion aldehyde
MDF	30700926	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Non-Blowline Blend:	Primary tube dryer	MDF, tube, direct natural gas-fired, non-blowline blend, hardwood	AP-42, Ch 10.6.3	lb/ODT			0.0085	0.96		
MDF	30700927	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Non-Blowline Blend:	Primary tube dryer	MDF, tube, direct natural gas-fired, non-blowline blend, hardwood	AP-42, Ch 10.6.3	lb/ODT			0.0085	0.96		
MDF	30700928	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Non-Blowline Blend: Mixed	Primary tube dryer	MDF, tube, direct natural gas-fired, non-blowline blend, hardwood	AP-42, Ch 10.6.3	lb/ODT			0.0085	0.96		
MDF	30700929	Pressurized Refiner/Primary Tube Dryer: Indirect-heated: Blowline Blend: Non-Urea Formaldehyde Resin:	Primary tube dryer	MDF, tube, indirect heated, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT	0.02		0.22	0.87	0.023	
MDF	30700930	Pressurized Refiner/Primary Tube Dryer: Indirect-heated: Blowline Blend: Non-Urea Formaldehyde Resin:	Primary tube dryer	MDF, tube, indirect heated, blowline blend, UF, hardwood	AP-42, Ch 10.6.3	lb/ODT	0.013		0.26			
MDF	30700932	Pressurized Refiner/Primary Tube Dryer: Indirect-heated: Blowline Blend: Urea Formaldehyde Resin:	Primary tube dryer	MDF, tube, indirect heated, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT	0.02		0.22	0.87	0.023	
MDF	30700934	Pressurized Refiner/Primary Tube Dryer: Indirect-heated: Blowline Blend: Non-Urea Formaldehyde Resin:	Primary tube dryer	MDF, tube, indirect heated, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT	0.02		0.22	0.87	0.023	
MDF	30700936	Pressurized Refiner/Primary Tube Dryer: Indirect-heated: Blowline Blend: Urea Formaldehyde Resin:	Primary tube dryer	MDF, tube, indirect heated, blowline blend, UF, hardwood	AP-42, Ch 10.6.3	lb/ODT	0.013		0.26			
MDF	30700939	Pressurized Refiner/Primary Tube Dryer: Indirect-heated: Blowline Blend: Urea Formaldehyde Resin:	Primary tube dryer	MDF, tube, indirect heated, blowline blend, UF, softwood	AP-42, Ch 10.6.3	lb/ODT	0.02		0.22	0.87	0.023	
MDF	30700942	Secondary Tube Dryer: All Indirect-fired Units	Secondary tube dryer	MDF, second stage tube dryer, indirect heated, softwood	AP-42, Ch 10.6.3	lb/ODT	0.0035		0.021	0.015		
MDF	30700943	Secondary Tube Dryer: All Direct-fired Units	Secondary tube dryer			No EF for SCC						
MDF	30700946	Fiber Dryers: Other	Other			No EF for SCC						
MDF	30700947	Agriculture Fiber Rotary Dryer	Rotary agricultural fiber dryer			No EF for SCC						
MDF	30700950	Reconstituted Wood Products Press: Continuous: Urea	Reconstituted wood product press	MDF, press, UF resin	AP-42, Ch 10.6.3	lb/MSF 3/4	0.014	0.0012	0.48	0.56	0.027	0.00054

PCWP	SCC	SCC Level Four	ICR Process Unit Type	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Acetaldehyde	Acrolein	Formaldehyde	Methanol	Phenol	Propion aldehyde
MDF	30700951	Reconstituted Wood Products Press: Continuous: Non-Urea Formaldehyde Resin	Reconstituted wood product press	MDF, press, UF resin	AP-42, Ch 10.6.3	lb/MSF 3/4	0.014	0.0012	0.48	0.56	0.027	0.00054
MDF	30700960	Reconstituted Wood Products Press: Batch: Urea Formaldehyde Resin	Reconstituted wood product press	MDF, press, UF resin	AP-42, Ch 10.6.3	lb/MSF 3/4	0.014	0.0012	0.48	0.56	0.027	0.00054
MDF	30700961	Reconstituted Wood Products Press: Batch: Non-Urea Formaldehyde Resin	Reconstituted wood product press	MDF, press, UF resin	AP-42, Ch 10.6.3	lb/MSF 3/4	0.014	0.0012	0.48	0.56	0.027	0.00054
MDF	30700962	Agriculture Fiber Board Press	Agriculture fiber board press		No EF for SCC							
MDF	30700971	Board Cooler: Urea Formaldehyde Resin	Reconstituted wood product board cooler	MDF board cooler, UF resin	AP-42, Ch 10.6.3	lb/MSF 3/4	0.001	0.00022	0.042	0.025		
MDF	30700972	Board Cooler: Non-Urea Formaldehyde Resin	Reconstituted wood product board cooler	MDF board cooler, UF resin	AP-42, Ch 10.6.3	lb/MSF 3/4	0.001	0.00022	0.042	0.025		
MDF	30700977	Former Without Blowline Blend: Non-Urea Formaldehyde Resin	Former	MDF former without blowline blend, UF resin (includes blender emissions)	AP-42, Ch 10.6.3	lb/ODT			0.06	0.41		
MDF	30700978	Former With Blowline Blend: Non-Urea Formaldehyde Resin	Former	MDF former without blowline blend, UF resin (includes blender emissions)	AP-42, Ch 10.6.3	lb/ODT			0.06	0.41		
MDF	30700979	Blender: Non-Urea Formaldehyde Resin	Blender		No EF for SCC							
MDF	30700980	Blender: Urea Formaldehyde Resin	Blender	MDF paddle blender, UF resin	AP-42, Ch 10.6.3	lb/ODT			0.01	0.48		
MDF	30700981	Former Without Blowline Blend: Urea Formaldehyde Resin	Former	MDF former without blowline blend, UF resin (includes blender emissions)	AP-42, Ch 10.6.3	lb/ODT			0.06	0.41		
MDF	30700982	Former With Blowline Blend: Urea Formaldehyde Resin	Former	MDF former with blowline blend, UF resin	AP-42, Ch 10.6.3	lb/ODT			0.0051	0.017		
MDF	30700983	Sanding Operations: Urea Formaldehyde Resin	Finishing sander	MDF sander	AP-42, Ch 10.6.3	lb/MSF			0.0027	0.0043	0.0069	
MDF	30700984	Sawing Operations: Pre-Press: Urea Formaldehyde Resin	Finishing saw	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim				0.38		
MDF	30700985	Sanding Operations: Non-Urea Formaldehyde Resin	Finishing sander	MDF sander	AP-42, Ch 10.6.3	lb/MSF			0.0027	0.0043	0.0069	
MDF	30700986	Sawing Operations: Pre-Press: Non-Urea Formaldehyde Resin	Finishing saw	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim				0.38		
MDF	30700987	Sawing Operations: Post-Board Cooler: Urea Formaldehyde Resin	Finishing saw	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim				0.38		
MDF	30700988	Sawing Operations: Post-Board Cooler: Non-Urea Formaldehyde Resin	Finishing saw	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim				0.38		
MDF	30700989	Sawing Operations: Post-Press: Pre-Board Cooler: Urea Formaldehyde Resin	Finishing saw	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim				0.38		
MDF	30700990	Sawing Operations: Post-Press: Pre-Board Cooler: Non-Urea Formaldehyde Resin	Finishing saw	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim				0.38		

PCWP	SCC	SCC Level Four	ICR Process Unit Type	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Acetaldehyde	Acrolein	Formaldehyde	Methanol	Phenol	Propion aldehyde
MDF	30700991	Panel Trim Hammermill/Chipper	Panel trim chipper	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim				0.38		
MDF	30700994	Combined Process Unit Type Dust Collection: Dry Wood Material	Other	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim				0.38		
MDF	30700995	Combined Process Unit Type Dust Collection: Mixed Dry and Green	Other	MDF saw (reclaim saw; emission factors in lb/MSF of reclaimed [trimmed] material)	AP-42, Ch 10.6.3	lb/MSF reclaim				0.38		
MDF	30700996	Resin Storage Tanks	Resin storage tank		No EF for SCC							
MDF	30700997	Miscellaneous Coating Operations	Miscellaneous coating operation	None	No EF for SCC							
MDF	30700999	Other Not Classified	Other		No EF for SCC							
OSB	30701009	Rotary Strand Dryer: Direct Wood-fired: Softwood	Rotary strand dryer	OSB, rotary, direct wood-fired, softwood	AP-42, Ch 10.6.1	lb/ODT	0.11	0.072	0.13	0.1	0.015	0.011
OSB	30701010	Rotary Strand Dryer: Direct Wood-fired: Hardwood	Rotary strand dryer	OSB, rotary, direct wood-fired, hardwood	AP-42, Ch 10.6.1	lb/ODT	0.62	0.2	0.11	0.33	0.028	0.034
OSB	30701015	Rotary Strand Dryer: Direct Wood-fired: Mixed Softwood/Hardwood	Rotary strand dryer	OSB, rotary, direct wood-fired, mixed wood species (40-60% softwood, 40-60% hardwood)	AP-42, Ch 10.6.1	lb/ODT	0.11	0.033	0.34			0.0098
OSB	30701020	Rotary Strand Dryer: Direct Natural Gas-fired: Hardwood	Rotary strand dryer	OSB, rotary, direct natural gas-fired, hardwood	AP-42, Ch 10.6.1	lb/ODT			0.036			
OSB	30701021	Rotary Strand Dryer: Direct Natural Gas-fired: Softwood	Rotary strand dryer	OSB, rotary, direct wood-fired, softwood	AP-42, Ch 10.6.1	lb/ODT	0.11	0.072	0.13	0.1	0.015	0.011
OSB	30701022	Rotary Strand Dryer: Direct Natural Gas-fired: Mixed Softwood/Hardwood	Rotary strand dryer	OSB, rotary, direct natural gas-fired, hardwood	AP-42, Ch 10.6.1	lb/ODT			0.036			
OSB	30701030	Rotary Strand Dryer: Indirect-heated: Hardwood	Rotary strand dryer		No EF for SCC							
OSB	30701031	Rotary Strand Dryer: Indirect-heated: Softwood	Rotary strand dryer	OSB, rotary, direct wood-fired, softwood	AP-42, Ch 10.6.1	lb/ODT	0.11	0.072	0.13	0.1	0.015	0.011
OSB	30701032	Rotary Strand Dryer: Indirect-heated: Mixed Softwood/Hardwood	Rotary strand dryer		No EF for SCC							
OSB	30701039	Indirect-heated Conveyor Dryer, Softwood	Conveyor strand dryer		No EF for SCC							
OSB	30701040	Conveyor Dryer: Heated Zones: Hardwood	Conveyor strand dryer	OSB, conveyor, indirect heated, hardwood (heated)	AP-42, Ch 10.6.1	lb/ODT			0.0024			
OSB	30701041	Conveyor Dryer: Heated Zones: Softwood	Conveyor strand dryer	OSB, conveyor, indirect heated, hardwood (heated)	AP-42, Ch 10.6.1	lb/ODT			0.0024			
OSB	30701042	Conveyor Dryer: Heated Zones: Mixed Hardwood/Softwood	Conveyor strand dryer	OSB, conveyor, indirect heated, hardwood (heated zones)	AP-42, Ch 10.6.1	lb/ODT			0.0024			
OSB	30701043	Conveyor Dryer: Unheated Zones: All Species	Conveyor strand dryer		No EF for SCC							
OSB	30701053	Reconstituted Wood Products Press: Phenol Formaldehyde Resin	Reconstituted wood product press	OSB, hot press, PF resin (liquid)	AP-42, Ch 10.6.1	lb/MSF 3/8	0.0052		0.044	0.5	0.072	

PCWP	SCC	SCC Level Four	ICR Process Unit Type	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Acetaldehyde	Acrolein	Formaldehyde	Methanol	Phenol	Propion aldehyde
OSB	30701055	Reconstituted Wood Products Press: Methylene Diphenyl Diisocyanate (MDI) Resin	Reconstituted wood product press	OSB, press, MDI resin	AP-42, Ch 10.6.1	lb/MSF 3/8			0.064			
OSB	30701057	Reconstituted Wood Products Press: Phenol Formaldehyde Resin (surface layers)/ Methylene Diphenyl Diisocyanate (MDI) Resin	Reconstituted wood product press	OSB, press, PF/MDI resin	AP-42, Ch 10.6.1	lb/MSF 3/8	0.01		0.056	0.25	0.015	
OSB	30701058	Reconstituted Wood Products Press	Reconstituted wood product press	OSB, hot press, PF resin (powder)	AP-42, Ch 10.6.1	lb/MSF 3/8			0.14			
OSB	30701062	Sanding Operations	Finishing sander	OSB sanderdust metering bin (holds fuel for dryer and thermal oil heater suspension burners)	AP-42, Ch 10.6.1	lb/MSF 3/8				0.00073		
OSB	30701064	Storage Bins: Trimming and Dryer Exhaust Cyclone Dust	Other	OSB raw fuel bin (holds fines from screens and saws)	AP-42, Ch 10.6.1	lb/MSF 3/8			0.0003	0.0015		
OSB	30701067	Combined Process Unit Type Dust Collection: Dry Wood Material	Other	OSB sanderdust metering bin (holds fuel for dryer and thermal oil heater suspension burners)	AP-42, Ch 10.6.1	lb/MSF 3/8				0.00073		
OSB	30701068	Combined Process Unit Type Dust Collection: Mixed Dry and Green Wood Material	Other	OSB sanderdust metering bin (holds fuel for dryer and thermal oil heater suspension burners)	AP-42, Ch 10.6.1	lb/MSF 3/8				0.00073		
OSB	30701070	Blender: Phenol Formaldehyde Resin	Blender	OSB blender (PF & MDI resin)	AP-42, Ch 10.6.1	lb/MSF 3/8			0.0036	0.063		
OSB	30701071	Blender: Methylene Diphenyl Diisocyanate (MDI) Resin	Blender	OSB blender (PF & MDI resin)	AP-42, Ch 10.6.1	lb/MSF 3/8			0.0036	0.063		
OSB	30701072	Former: Phenol Formaldehyde Resin	Former		No EF for SCC							
OSB	30701073	Former Operations: Methylene Diphenyl Diisocyanate (MDI) Resin	Former		No EF for SCC							
OSB	30701074	Former Operations: Phenol Formaldehyde Resin/Methylene Diphenyl Diisocyanate (MDI) Resin	Former		No EF for SCC							
OSB	30701084	Hammermill/Chipper: Dry Wood Material	Panel trim chipper	SPW dry trim chipper (chips dry trim from SPW panel saws; process rate = finished board production)	AP-42, Ch 10.5	lb/MSF 3/8				0.0078		
OSB	30701085	Hammermill/Chipper: Mixed Green and Dry Wood Material	Panel trim chipper	SPW dry trim chipper (chips dry trim from SPW panel saws; process rate = finished board production)	AP-42, Ch 10.5	lb/MSF 3/8				0.0078		
OSB	30701086	Miscellaneous Coating Operations	Miscellaneous coating operation		No EF for SCC							
OSB	30701087	Resin Storage Tanks	Resin storage tank		No EF for SCC							



PCWP	SCC	SCC Level Four	ICR Process Unit Type	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Acetaldehyde	Acrolein	Formaldehyde	Methanol	Phenol	Propion aldehyde
OSB	30701090	Sawing Operations: Pre-Press Mat Trimming: Phenol Formaldehyde	Finishing saw	OSB raw fuel bin (holds fines from screens and saws)	AP-42, Ch 10.6.1	lb/MSF 3/8			0.0003	0.0015		
OSB	30701091	Sawing Operations: Pre-Press Mat Trimming: Methylene Diphenyl Diisocyanate (MDI) Resin	Finishing saw	OSB raw fuel bin (holds fines from screens and saws)	AP-42, Ch 10.6.1	lb/MSF 3/8			0.0003	0.0015		
OSB	30701092	Sawing Operations: Pre-Press Mat Trimming: Phenol Formaldehyde Resin/Methylene Diphenyl Diisocyanate (MDI) Resin	Finishing saw	OSB raw fuel bin (holds fines from screens and saws)	AP-42, Ch 10.6.1	lb/MSF 3/8			0.0003	0.0015		
OSB	30701093	Sawing Operations: Post-Press Panel Trimming: Phenol Formaldehyde	Finishing saw	OSB raw fuel bin (holds fines from screens and saws)	AP-42, Ch 10.6.1	lb/MSF 3/8			0.0003	0.0015		
OSB	30701094	Sawing Operations: Post-Press Panel Trimming: Methylene Diphenyl Diisocyanate (MDI) Resin	Finishing saw	OSB raw fuel bin (holds fines from screens and saws)	AP-42, Ch 10.6.1	lb/MSF 3/8			0.0003	0.0015		
OSB	30701095	Sawing Operations: Post-Press Panel Trimming: Phenol Formaldehyde Resin/Methylene Diphenyl Diisocyanate (MDI) Resin	Finishing saw	OSB raw fuel bin (holds fines from screens and saws)	AP-42, Ch 10.6.1	lb/MSF 3/8			0.0003	0.0015		
OSB	30701099	Other Not Classified	Other		No EF for SCC							
HB	30701401	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Non-Phenol Formaldehyde	Primary tube dryer	HB, tube, direct wood-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.11		0.26	1	0.083	
HB	30701402	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Non-Phenol Formaldehyde	Primary tube dryer	HB, tube, direct wood-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.11		0.26	1	0.083	
HB	30701403	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Non-Phenol Formaldehyde	Primary tube dryer	HB, tube, direct wood-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.11		0.26	1	0.083	
HB	30701404	Pressurized Refiner/Primary Tube Dryer: Natural Gas-fired: Blowline Blend: Non-Phenol Formaldehyde	Primary tube dryer	HB, tube, direct natural gas-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.0096	0.0041	1.1	1.4	0.056	0.041
HB	30701405	Pressurized Refiner/Primary Tube Dryer: Natural Gas-fired: Blowline Blend: Non-Phenol Formaldehyde	Primary tube dryer	HB, tube, direct natural gas-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.0096	0.0041	1.1	1.4	0.056	0.041

PCWP	SCC	SCC Level Four	ICR Process Unit Type	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Acetaldehyde	Acrolein	Formaldehyde	Methanol	Phenol	Propion aldehyde
HB	30701406	Pressurized Refiner/Primary Tube Dryer: Natural Gas-fired: Blowline Blend: Non-Phenol Formaldehyde	Primary tube dryer	HB, tube, direct natural gas-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.0096	0.0041	1.1	1.4	0.056	0.041
HB	30701407	Pressurized Refiner/Primary Tube Dryer: Indirect-fired: Blowline Blend: Phenol Formaldehyde Resin:	Primary tube dryer	HB, tube, direct natural gas-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.0096	0.0041	1.1	1.4	0.056	0.041
HB	30701408	Pressurized Refiner/Primary Tube Dryer: Indirect-fired: Blowline Blend: Phenol Formaldehyde Resin:	Primary tube dryer	HB, tube, direct natural gas-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.0096	0.0041	1.1	1.4	0.056	0.041
HB	30701409	Pressurized Refiner/Primary Tube Dryer: Indirect-fired: Blowline Blend: Phenol Formaldehyde Resin:	Primary tube dryer	HB, tube, direct natural gas-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.0096	0.0041	1.1	1.4	0.056	0.041
HB	30701410	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Phenol Formaldehyde Resin:	Primary tube dryer	HB, tube, direct wood-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.11		0.26	1	0.083	
HB	30701411	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Phenol Formaldehyde Resin:	Primary tube dryer	HB, tube, direct wood-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.11		0.26	1	0.083	
HB	30701412	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Phenol Formaldehyde Resin:	Primary tube dryer	HB, tube, direct wood-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.11		0.26	1	0.083	
HB	30701413	Pressurized Refiner/Primary Tube Dryer: Natural Gas-fired: Blowline Blend: Phenol Formaldehyde Resin:	Primary tube dryer	HB, tube, direct natural gas-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.0096	0.0041	1.1	1.4	0.056	0.041
HB	30701414	Pressurized Refiner/Primary Tube Dryer: Natural Gas-fired: Blowline Blend: Phenol Formaldehyde Resin:	Primary tube dryer	HB, tube, direct natural gas-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.0096	0.0041	1.1	1.4	0.056	0.041
HB	30701415	Pressurized Refiner/Primary Tube Dryer: Natural Gas-fired: Blowline Blend: Phenol Formaldehyde Resin:	Primary tube dryer	HB, tube, direct natural gas-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.0096	0.0041	1.1	1.4	0.056	0.041

PCWP	SCC	SCC Level Four	ICR Process Unit Type	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Acetaldehyde	Acrolein	Formaldehyde	Methanol	Phenol	Propion aldehyde
HB	30701417	Pressurized Refiner/Primary Tube Dryer: Indirect-fired: Blowline Blend: Non-Phenol Formaldehyde	Primary tube dryer	HB, tube, direct natural gas-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.0096	0.0041	1.1	1.4	0.056	0.041
HB	30701418	Pressurized Refiner/Primary Tube Dryer: Indirect-fired: Blowline Blend: Non-Phenol Formaldehyde	Primary tube dryer	HB, tube, direct natural gas-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.0096	0.0041	1.1	1.4	0.056	0.041
HB	30701419	Pressurized Refiner/Primary Tube Dryer: Indirect-fired: Blowline Blend: Non-Phenol Formaldehyde	Primary tube dryer	HB, tube, direct natural gas-fired, blowline blend, PF, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.0096	0.0041	1.1	1.4	0.056	0.041
HB	30701421	Hardboard Oven	Hardboard oven	HB, tempering oven, direct natural gas-fired, hardwood	AP-42, Ch 10.6.4	lb/MSF 1/8	0.076	0.024	0.0043	0.015	0.0019	0.1
HB	30701423	Secondary Tube Dryer: All Direct-fired Units	Secondary tube dryer	HB, second stage tube dryer, indirect heated, hardwood	AP-42, Ch 10.6.4	lb/ODT			0.017	0.042	0.039	
HB	30701424	Secondary Tube Dryer: All Indirect-fired Units	Secondary tube dryer	HB, second stage tube dryer, indirect heated, hardwood	AP-42, Ch 10.6.4	lb/ODT			0.017	0.042	0.039	
HB	30701426	Fiber Dryers: Other	Other		No EF for SCC							
HB	30701427	Press Pre-Dryer: Phenol Formaldehyde Resin	Hardboard press predryer	FB, board dryer, indirect heated, softwood, starch binder (heated zones)	AP-42, Ch 10.6.4	lb/MSF 1/2	0.00097	0.00057	0.0093	0.017	0.0012	0.00069
HB	30701428	Press Pre-Dryer: Non-Phenol Formaldehyde Resin	Hardboard press predryer	HB, board dryer, direct natural gas-fired, softwood, linseed oil binder (heated zones)	AP-42, Ch 10.6.4	lb/MSF 1/2	0.053	0.037	0.059	0.047	0.0018	0.025
HB	30701431	Humidifier	Hardboard humidifier	HB, humidification kiln, indirect heated	AP-42, Ch 10.6.4	lb/MSF 1/8	0.0018	0.0087	0.001		0.00057	0.0077
HB	30701441	Dry Hardboard Press: Phenol Formaldehyde	Reconstituted wood product press	Hardboard, press, PF resin	AP-42, Ch 10.6.4	lb/MSF 1/8	0.016		0.014	0.25	0.01	
HB	30701443	Dry Hardboard Press: Non-Phenol Formaldehyde	Reconstituted wood product press	Hardboard, press, linseed oil binder	AP-42, Ch 10.6.4	lb/MSF 1/8	0.036	0.0057	0.018	0.093	0.0039	0.031
HB	30701444	Wet Hardboard Press: Phenol Formaldehyde	Reconstituted wood product press	Hardboard, press, PF resin	AP-42, Ch 10.6.4	lb/MSF 1/8	0.016		0.014	0.25	0.01	
HB	30701445	Wet Hardboard Press: Non-Phenol Formaldehyde	Reconstituted wood product press	Hardboard, press, PF resin	AP-42, Ch 10.6.4	lb/MSF 1/8	0.016		0.014	0.25	0.01	
HB	30701450	Blender: Phenol Formaldehyde Resin	Blender	OSB blender (PF & MDI resin)	AP-42, Ch 10.6.1	lb/MSF 3/8			0.0036	0.063		
HB	30701451	Blender: Non-Phenol Formaldehyde Resin	Blender		No EF for SCC							
HB	30701452	Fiber Washer	Fiber washer	FB, washer, softwood	AP-42, Ch 10.6.4	lb/ODT	0.015		0.0026	0.13		
HB	30701455	Digester: Softwood	Stand alone digester	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.03	0.0024	0.0045	0.35	0.0012	0.00091
HB	30701456	Digester: Hardwood	Stand alone digester	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.03	0.0024	0.0045	0.35	0.0012	0.00091
HB	30701457	Digester: Mixed Softwood/Hardwood	Stand alone digester	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.03	0.0024	0.0045	0.35	0.0012	0.00091
HB	30701460	Atmospheric Refiner: Softwood	Atmospheric refiner	FB, atmospheric refiner and dump chest, softwood	AP-42, Ch 10.6.4	lb/ODT	0.0027	0.0003	0.00061	0.0084		0.00026

PCWP	SCC	SCC Level Four	ICR Process Unit Type	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Acetaldehyde	Acrolein	Formaldehyde	Methanol	Phenol	Propion aldehyde
HB	30701461	Atmospheric Refiner: Hardwood	Atmospheric refiner	FB, atmospheric refiner and dump chest, softwood	AP-42, Ch 10.6.4	lb/ODT	0.0027	0.0003	0.00061	0.0084		0.00026
HB	30701462	Atmospheric Refiner: Mixed	Atmospheric refiner	FB, atmospheric refiner and dump chest, softwood	AP-42, Ch 10.6.4	lb/ODT	0.0027	0.0003	0.00061	0.0084		0.00026
HB	30701463	Pressurized Refiner: Softwood	Pressurized refiner	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.03	0.0024	0.0045	0.35	0.0012	0.00091
HB	30701464	Pressurized Refiner: Hardwood	Pressurized refiner	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.03	0.0024	0.0045	0.35	0.0012	0.00091
HB	30701465	Pressurized Refiner: Mixed Softwood/Hardwood	Pressurized refiner	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.03	0.0024	0.0045	0.35	0.0012	0.00091
HB	30701466	Pressurized Digester/Refiner: Softwood	Pressurized refiner	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.03	0.0024	0.0045	0.35	0.0012	0.00091
HB	30701467	Pressurized Digester/Refiner:	Pressurized refiner	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.03	0.0024	0.0045	0.35	0.0012	0.00091
HB	30701468	Pressurized Digester/Refiner: Mixed Softwood/Hardwood	Pressurized refiner	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.03	0.0024	0.0045	0.35	0.0012	0.00091
HB	30701480	Sanding Operations	Finishing sander	OSB sanderdust metering bin (holds fuel for dryer and thermal oil heater suspension burners)	AP-42, Ch 10.6.1	lb/MSF 3/8				0.00073		
HB	30701481	Sawing Operations	Finishing saw	OSB raw fuel bin (holds fines from screens and saws)	AP-42, Ch 10.6.1	lb/MSF 3/8			0.0003	0.0015		
HB	30701485	Wet Hardboard Former: Vacuum System: Non-Phenol Formaldehyde	Former	HB former, wet, PF resin	AP-42, Ch 10.6.4	lb/ODT	0.0058		0.00026	0.054	0.00071	0.00021
HB	30701486	Wet Hardboard Former: Vacuum System: Phenol Formaldehyde Resin	Former	HB former, wet, PF resin	AP-42, Ch 10.6.4	lb/ODT	0.0058		0.00026	0.054	0.00071	0.00021
HB	30701487	Dry Process Former Operations: Dust Collection: Phenol	Former		No EF for SCC							
HB	30701488	Dry Process Former Operations: Dust Collection: Non-Phenol Formaldehyde Resin	Former		No EF for SCC							
HB	30701489	Wet Process Former Operations: Dust (Fiber) Collection: Phenol Formaldehyde Resin	Former		No EF for SCC							
HB	30701490	Wet Process Former Operations: Dust (Fiber) Collection: Non-Phenol Formaldehyde Resin	Former		No EF for SCC							
HB	30701493	Combined Process Unit Type Dust Collection: Dry Wood Material	Other		No EF for SCC							
HB	30701494	Combined Process Unit Type Dust Collection: Mixed Dry and Green	Other		No EF for SCC							
HB	30701495	Panel Trim Chipper	Panel trim chipper	OSB raw fuel bin (holds fines from screens and saws)	AP-42, Ch 10.6.1	lb/MSF 3/8			0.0003	0.0015		
HB	30701496	Miscellaneous Coating Operations	Miscellaneous coating operation		No EF for SCC							

PCWP	SCC	SCC Level Four	ICR Process Unit Type	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Acetaldehyde	Acrolein	Formaldehyde	Methanol	Phenol	Propion aldehyde
HB	30701497	Resin Storage Tanks	Resin storage tank		No EF for SCC							
HB	30701499	Other Not Classified	Other		No EF for SCC							
FB	30701513	Mat Dryer: Indirect-heated: Starch binder: Softwood	Fiberboard mat dryer	FB, board dryer, indirect heated, softwood, starch binder (heated zones)	AP-42, Ch 10.6.4	lb/MSF 1/2	0.00097	0.00057	0.0093	0.017	0.0012	0.00069
FB	30701514	Mat Dryer: Indirect-heated: Starch binder: Hardwood	Fiberboard mat dryer	FB, board dryer, indirect heated, softwood, starch binder (heated zones)	AP-42, Ch 10.6.4	lb/MSF 1/2	0.00097	0.00057	0.0093	0.017	0.0012	0.00069
FB	30701515	Mat Dryer: Indirect-heated: Starch binder: Mixed	Fiberboard mat dryer	FB, board dryer, indirect heated, softwood, starch binder (heated zones)	AP-42, Ch 10.6.4	lb/MSF 1/2	0.00097	0.00057	0.0093	0.017	0.0012	0.00069
FB	30701516	Mat Dryer: Indirect-heated: Asphalt binder: Softwood	Fiberboard mat dryer	FB, board dryer, indirect heated, softwood, 6-12% asphalt binder (heated zones)	AP-42, Ch 10.6.4	lb/MSF 1/2	0.0029	0.0012	0.013	0.026	0.0014	
FB	30701517	Mat Dryer: Indirect-heated: Asphalt binder: Hardwood	Fiberboard mat dryer	FB, board dryer, indirect heated, softwood, 6-12% asphalt binder (heated zones)	AP-42, Ch 10.6.4	lb/MSF 1/2	0.0029	0.0012	0.013	0.026	0.0014	
FB	30701518	Mat Dryer: Indirect-heated: Asphalt binder: Mixed	Fiberboard mat dryer	FB, board dryer, indirect heated, softwood, 6-12% asphalt binder (heated zones)	AP-42, Ch 10.6.4	lb/MSF 1/2	0.0029	0.0012	0.013	0.026	0.0014	
FB	30701519	Mat Dryer: Direct-heated: Starch binder: Softwood	Fiberboard mat dryer	FB, board dryer, indirect heated, softwood, starch binder (heated zones)	AP-42, Ch 10.6.4	lb/MSF 1/2	0.00097	0.00057	0.0093	0.017	0.0012	0.00069
FB	30701520	Mat Dryer: Direct-heated: Starch binder: Hardwood	Fiberboard mat dryer	FB, board dryer, indirect heated, softwood, starch binder (heated zones)	AP-42, Ch 10.6.4	lb/MSF 1/2	0.00097	0.00057	0.0093	0.017	0.0012	0.00069
FB	30701521	Mat Dryer: Direct-heated: Starch binder: Mixed Softwood/Hardwood	Fiberboard mat dryer	FB, board dryer, indirect heated, softwood, starch binder (heated zones)	AP-42, Ch 10.6.4	lb/MSF 1/2	0.00097	0.00057	0.0093	0.017	0.0012	0.00069
FB	30701522	Mat Dryer: Direct-heated: Asphalt binder: Softwood	Fiberboard mat dryer	FB, board dryer, indirect heated, softwood, 6-12% asphalt binder (heated zones)	AP-42, Ch 10.6.4	lb/MSF 1/2	0.0029	0.0012	0.013	0.026	0.0014	
FB	30701523	Mat Dryer: Direct-heated: Asphalt binder: Hardwood	Fiberboard mat dryer	FB, board dryer, indirect heated, softwood, 6-12% asphalt binder (heated zones)	AP-42, Ch 10.6.4	lb/MSF 1/2	0.0029	0.0012	0.013	0.026	0.0014	
FB	30701524	Mat Dryer: Direct-heated: Asphalt binder: Mixed Softwood/Hardwood	Fiberboard mat dryer	FB, board dryer, indirect heated, softwood, 6-12% asphalt binder (heated zones)	AP-42, Ch 10.6.4	lb/MSF 1/2	0.0029	0.0012	0.013	0.026	0.0014	
FB	30701528	Atmospheric Refiner: Hardwood	Atmospheric refiner	FB, atmospheric refiner and dump chest, softwood	AP-42, Ch 10.6.4	lb/ODT	0.0027	0.0003	0.00061	0.0084		0.00026
FB	30701529	Atmospheric Refiner: Mixed	Atmospheric refiner	FB, atmospheric refiner and dump chest, softwood	AP-42, Ch 10.6.4	lb/ODT	0.0027	0.0003	0.00061	0.0084		0.00026
FB	30701530	Atmospheric Refiner: Softwood	Atmospheric refiner	FB, atmospheric refiner and dump chest, softwood	AP-42, Ch 10.6.4	lb/ODT	0.0027	0.0003	0.00061	0.0084		0.00026
FB	30701531	Pressurized Refiner: Softwood	Pressurized refiner	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.03	0.0024	0.0045	0.35	0.0012	0.00091
FB	30701532	Pressurized Refiner: Hardwood	Pressurized refiner	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.03	0.0024	0.0045	0.35	0.0012	0.00091
FB	30701533	Pressurized Refiner: Mixed Softwood/Hardwood	Pressurized refiner	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.03	0.0024	0.0045	0.35	0.0012	0.00091
FB	30701534	Digester: Softwood	Stand alone digester		No EF for SCC							

PCWP	SCC	SCC Level Four	ICR Process Unit Type	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Acetaldehyde	Acrolein	Formaldehyde	Methanol	Phenol	Propion aldehyde
FB	30701535	Digester: Hardwood	Stand alone digester	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.03	0.0024	0.0045	0.35	0.0012	0.00091
FB	30701536	Digester: Mixed Softwood/Hardwood	Stand alone digester	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.03	0.0024	0.0045	0.35	0.0012	0.00091
FB	30701537	Pressurized Digester/Refiner: Softwood	Pressurized refiner	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.03	0.0024	0.0045	0.35	0.0012	0.00091
FB	30701538	Pressurized Digester/Refiner:	Pressurized refiner	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.03	0.0024	0.0045	0.35	0.0012	0.00091
FB	30701539	Pressurized Digester/Refiner: Mixed Softwood/Hardwood	Pressurized refiner	HB pressurized digester/refiner, hardwood	AP-42, Ch 10.6.4	lb/ODT	0.03	0.0024	0.0045	0.35	0.0012	0.00091
FB	30701540	Fiber Washer: Softwood	Fiber washer	FB, washer, softwood	AP-42, Ch 10.6.4	lb/ODT	0.015		0.0026	0.13		
FB	30701541	Fiber Washer: Hardwood	Fiber washer	FB, washer, softwood	AP-42, Ch 10.6.4	lb/ODT	0.015		0.0026	0.13		
FB	30701542	Fiber Washer: Mixed Softwood/Hardwood	Fiber washer	FB, washer, softwood	AP-42, Ch 10.6.4	lb/ODT	0.015		0.0026	0.13		
FB	30701551	Wet Fiberboard Former: Vacuum: All Binder	Former	FB, former, wet, 6-12% asphalt	AP-42, Ch 10.6.4	lb/MSF 1/2	0.0075		0.0036	0.014		
FB	30701561	Panel Trim Chipper	Panel trim chipper	OSB raw fuel bin (holds fines from screens and saws)	AP-42, Ch 10.6.1	lb/MSF 3/8			0.0003	0.0015		
FB	30701562	Sawing Operations	Finishing saw	OSB raw fuel bin (holds fines from screens and saws)	AP-42, Ch 10.6.1	lb/MSF 3/8			0.0003	0.0015		
FB	30701567	Combined Process Unit Type Dust Collection: Dry Wood Material	Other		No EF for SCC							
FB	30701568	Combined Process Unit Type Dust Collection: Mixed Dry and Green	Other		No EF for SCC							
FB	30701591	Miscellaneous Coating Operations	Miscellaneous coating operation		No EF for SCC							
FB	30701592	Resin Storage Tanks	Resin storage tank		No EF for SCC							
FB	30701599	Other Not Classified	Other		No EF for SCC							
LVL	30701601	Hardwood Veneer Dryer: Indirect-heated: Heated Zones	Hardwood veneer dryer	HPW, veneer, indirect heated, hardwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	0.0043		0.0011	0.041	0.003	
LVL	30701602	Hardwood Veneer Dryer: Indirect-heated: Cooling Section	Hardwood veneer dryer	HPW, veneer, indirect heated, hardwood (cooling section)	AP-42, Ch 10.5	lb/MSF 3/8	0.032		0.0065	0.021		
LVL	30701603	Softwood Veneer Dryer: Indirect-heated: Heated Zones	Softwood veneer dryer	SPW, veneer, indirect heated, softwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	0.017	0.0013	0.014	0.039	0.0034	0.0024
LVL	30701604	Softwood Veneer Dryer: Indirect-heated: Cooling Section	Softwood veneer dryer	SPW, veneer, indirect heated, softwood (cooling section)	AP-42, Ch 10.5	lb/MSF 3/8	0.0046		0.0013	0.01	0.0062	
LVL	30701605	Hardwood Veneer Dryer: Direct Wood-fired: Heated Zones	Hardwood veneer dryer	HPW, veneer, direct wood-fired, hardwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	0.0052		0.0025	0.0095		
LVL	30701606	Hardwood Veneer Dryer: Direct Wood-fired: Cooling Section	Hardwood veneer dryer	HPW, veneer, direct wood-fired, hardwood (cooling section)	AP-42, CH 10.5 (All EF BDL)							

PCWP	SCC	SCC Level Four	ICR Process Unit Type	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Acetaldehyde	Acrolein	Formaldehyde	Methanol	Phenol	Propion aldehyde
LVL	30701607	Softwood Veneer Dryer: Direct Wood-fired: Heated Zones	Softwood veneer dryer	SPW, veneer, direct wood-fired, softwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8			0.045			
LVL	30701608	Softwood Veneer Dryer: Direct Wood-fired: Cooling Section	Softwood veneer dryer	SPW, veneer, direct natural gas-fired, softwood (cooling section)	AP-42, Ch 10.5	lb/MSF 3/8	0.0034		0.0015	0.0057	0.01	
LVL	30701609	Hardwood Veneer Dryer: Direct Natural Gas-fired: Heated Zones	Hardwood veneer dryer	HPW, veneer, direct wood-fired, hardwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	0.0052		0.0025	0.0095		
LVL	30701610	Hardwood Veneer Dryer: Direct Natural Gas-fired: Cooling Section	Hardwood veneer dryer	HPW, veneer, direct wood-fired, hardwood (cooling section)	AP-42, CH 10.5 (All EF BDL)							
LVL	30701611	Softwood Veneer Dryer: Direct Natural Gas-fired: Heated Zones	Softwood veneer dryer	SPW, veneer, direct natural gas-fired, softwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	0.062	0.009	0.064	0.036	0.006	0.0016
LVL	30701612	Press: Phenol Formaldehyde Resin	Engineered wood products press	LVL, press, PF resin	AP-42, Ch 10.9	lb/MCF	0.29		0.29	3.1		0.24
LVL	30701613	Softwood Veneer Dryer: Direct Natural Gas-fired: Cooling Section	Softwood veneer dryer	SPW, veneer, direct natural gas-fired, softwood (cooling section)	AP-42, Ch 10.5	lb/MSF 3/8	0.0034		0.0015	0.0057	0.01	
LVL	30701614	Press: Non-Phenol Formaldehyde Resin	Engineered wood products press	LSL Hot press, MDI resin	AP-42, Ch 10.9	lb/MCF			0.029			
LVL	30701615	Veneer Redryer: Radio Frequency-heated: Softwood	Veneer redryer	SPW, veneer, RF heated, softwood	AP-42, Ch 10.5	lb/MSF 3/8	0.0015		0.00035	0.0027		
LVL	30701616	Veneer Redryer: Radio Frequency-heated: Hardwood	Veneer redryer	SPW, veneer, RF heated, softwood	AP-42, Ch 10.5	lb/MSF 3/8	0.0015		0.00035	0.0027		
LVL	30701617	Veneer Redryer: Non-RF Heat: Softwood	Veneer redryer		No EF for SCC							
LVL	30701618	Veneer Redryer: Non-RF Heat: Hardwood	Veneer redryer		No EF for SCC							
LVL	30701619	Sanding Operations	Finishing sander	OSB sanderdust metering bin (holds fuel for dryer and thermal oil heater suspension burners)	AP-42, Ch 10.6.1	lb/MSF 3/8				0.00073		
LVL	30701623	Hammermill/Chipper: Dry Wood Material	Panel trim chipper		AP-42, Ch 10.9	lb/MLF						
LVL	30701624	Hammermill/Chipper: Mixed Green and Dry Wood Material	Panel trim chipper		AP-42, Ch 10.9	lb/MLF						
LVL	30701627	Sawing Operations: Dry Veneer and Laminated Veneer Lumber (LVL) Trimming	Finishing saw		AP-42, Ch 10.9	lb/MLF						
LVL	30701628	Log Steaming Vat	Log vat	SPW log steaming vat (process rate = volume of wood removed from vat per hour)	AP-42, Ch 10.5	lb/MSF 3/8	0.0047			0.0073		
LVL	30701629	Resin Storage Tanks	Resin storage tank		No EF for SCC							
LVL	30701633	Combined Process Unit Type Dust Collection: Dry Wood Material	Other		AP-42, Ch 10.9	lb/MLF						

PCWP	SCC	SCC Level Four	ICR Process Unit Type	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Acetaldehyde	Acrolein	Formaldehyde	Methanol	Phenol	Propion aldehyde
LVL	30701634	Combined Process Unit Type Dust Collection: Mixed Dry and Green	Other	No EF for SCC	AP-42, Ch 10.9	lb/MLF						
LVL	30701635	Miscellaneous Coating Operations	Miscellaneous coating operation		No EF for SCC							
LVL	30701639	Other Not Classified	Other		No EF for SCC							
IJoist	30701670	Curing Chamber	Engineered wood products press	I-Joist curing chamber	AP-42, Ch 10.9	lb/MLF			0.00018	0.00063		
IJoist	30701671	Resin Storage Tanks	Resin storage tank		No EF for SCC							
IJoist	30701672	Sawing Operations	Finishing saw	LVL, I-Beam Saw	AP-42, Ch 10.9	lb/MLF				0.016		
IJoist	30701679	Other Not Classified	Other		No EF for SCC							
GLULAM	30701680	Press/Curing Chamber: Phenol-Resorcinol-Formaldehyde (PRF) resin	Engineered wood products press		No EF for SCC							
GLULAM	30701681	Press/Curing Chamber: Non-Phenol-Resorcinol-Formaldehyde (PRF) Resin	Engineered wood products press		No EF for SCC							
GLULAM	30701682	Resin Storage Tanks	Resin storage tank		No EF for SCC							
GLULAM	30701683	Chippers	Other		No EF for SCC							
GLULAM	30701684	Sanding Operations	Finishing sander		No EF for SCC							
GLULAM	30701685	Sawing Operations	Finishing saw		No EF for SCC							
GLULAM	30701689	Other Not Classified	Other		No EF for SCC							
LSL	30701701	Rotary Strand Dryer: Direct Wood-fired: Hardwood	Rotary strand dryer	LSL, rotary, direct wood-fired, hardwood	AP-42, Ch 10.9	lb/ODT		0.0062	0.096			
LSL	30701702	Rotary Strand Dryer: Direct Wood-fired: Softwood	Rotary strand dryer	OSB, rotary, direct wood-fired, softwood	AP-42, Ch 10.9	lb/ODT		0.0062	0.096			
LSL	30701703	Rotary Strand Dryer: Direct Wood-fired: Mixed Softwood/Hardwood	Rotary strand dryer	OSB, rotary, direct wood-fired, softwood	AP-42, Ch 10.9	lb/ODT		0.0062	0.096			
LSL	30701704	Rotary Strand Dryer: Direct Natural Gas-fired:	Rotary strand dryer	OSB, rotary, direct wood-fired, softwood	AP-42, Ch 10.9	lb/ODT		0.0062	0.096			
LSL	30701705	Rotary Strand Dryer: Direct Natural Gas-fired: Hardwood	Rotary strand dryer	OSB, rotary, direct natural gas-fired, hardwood	AP-42, Ch 10.9	lb/ODT		0.0062	0.096			
LSL	30701706	Rotary Strand Dryer: Direct Natural Gas-fired: Mixed Softwood/Hardwood	Rotary strand dryer	OSB, rotary, direct natural gas-fired, hardwood	AP-42, Ch 10.9	lb/ODT		0.0062	0.096			
LSL	30701707	Rotary Strand Dryer: Indirect-heated: Softwood	Rotary strand dryer	OSB, rotary, direct wood-fired, softwood	AP-42, Ch 10.9	lb/ODT		0.0062	0.096			
LSL	30701708	Rotary Strand Dryer: Indirect-heated: Hardwood	Rotary strand dryer	OSB, rotary, indirect-heated, hardwood	AP-42, Ch 10.9	lb/ODT		0.0062	0.096			
LSL	30701709	Rotary Strand Dryer: Indirect-heated: Mixed Softwood/Hardwood	Rotary strand dryer	OSB, rotary, indirect-heated, hardwood	AP-42, Ch 10.9	lb/ODT		0.0062	0.096			



PCWP	SCC	SCC Level Four	ICR Process Unit Type	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Acetaldehyde	Acrolein	Formaldehyde	Methanol	Phenol	Propion aldehyde
LSL	30701710	Conveyor Dryer: Heated Zones: Hardwood	Conveyor strand dryer	OSB, conveyor, indirect heated, hardwood (heated zones)	AP-42, Ch 10.9 (All EF BDL)							
LSL	30701711	Conveyor Dryer: Heated Zones: Softwood	Conveyor strand dryer	LSL conveyor dryer, indirect-heated, hardwood	AP-42, Ch 10.9 (All EF BDL)							
LSL	30701712	Conveyor Dryer: Heated Zones: Mixed Hardwood/Softwood	Conveyor strand dryer	LSL conveyor dryer, indirect-heated, hardwood	AP-42, Ch 10.9 (All EF BDL)							
LSL	30701713	Conveyor Dryer: Unheated Zones: All Species	Conveyor strand dryer	LSL conveyor dryer, indirect-heated, hardwood	AP-42, Ch 10.9 (All EF BDL)							
LSL	30701720	Press: Methylene Diphenyl Diisocyanate (MDI) Adhesive	Engineered wood products press	LSL Hot press, MDI resin	AP-42, Ch 10.9	lb/MCF			0.029			
LSL	30701721	Press: Non-Methylene Diphenyl Diisocyanate (MDI) Adhesive	Engineered wood products press	LVL, LVL Hot press, PF resin	AP-42, Ch 10.9							
LSL	30701722	Blender: Methylene Diphenyl Diisocyanate (MDI) Adhesive	Blender	OSB blender (PF & MDI resin)	AP-42, Ch 10.6.1	lb/MSF 3/8			0.0036	0.063		
LSL	30701723	Blender: Non-Methylene Diphenyl Diisocyanate (MDI) Adhesive	Blender	OSB blender (PF & MDI resin)	AP-42, Ch 10.6.1	lb/MSF 3/8			0.0036	0.063		
LSL	30701724	Former Operations: Methylene Diphenyl Diisocyanate (MDI) Adhesive	Former		No EF for SCC							
LSL	30701725	Former Operations: Non-Methylene Diphenyl Diisocyanate (MDI) Adhesive	Former		No EF for SCC							
LSL	30701730	Sanding Operations	Finishing sander	OSB sanderdust metering bin (holds fuel for dryer and thermal oil heater suspension burners)	AP-42, Ch 10.6.1	lb/MSF 3/8				0.00073		
LSL	30701731	Sawing Operations	Finishing saw		AP-42, Ch 10.9	lb/MLF						
LSL	30701735	Hammermill/Chipper: Dry Wood Material	Panel trim chipper		AP-42, Ch 10.9	lb/MLF						
LSL	30701736	Hammermill/Chipper: Mixed Green and Dry Wood Material	Panel trim chipper		AP-42, Ch 10.9	lb/MLF						
LSL	30701737	Resin Storage Tanks	Resin storage tank		No EF for SCC							
LSL	30701739	Other Not Classified	Other		No EF for SCC							
PSL	30701740	Hardwood Veneer Dryer: Indirect-heated: Heated Zones	Hardwood veneer dryer	HPW, veneer, indirect heated, hardwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	0.0043		0.0011	0.041	0.003	
PSL	30701741	Hardwood Veneer Dryer: Indirect-heated: Cooling Section	Hardwood veneer dryer	HPW, veneer, indirect heated, hardwood (cooling section)	AP-42, Ch 10.5	lb/MSF 3/8	0.032		0.0065	0.021		

PCWP	SCC	SCC Level Four	ICR Process Unit Type	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Acetaldehyde	Acrolein	Formaldehyde	Methanol	Phenol	Propion aldehyde
PSL	30701742	Softwood Veneer Dryer: Indirect-heated: Heated Zones	Softwood veneer dryer	SPW, veneer, indirect heated, softwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	0.017	0.0013	0.014	0.039	0.0034	0.0024
PSL	30701743	Softwood Veneer Dryer: Indirect-heated: Cooling Section	Softwood veneer dryer	SPW, veneer, indirect heated, softwood (cooling section)	AP-42, Ch 10.5	lb/MSF 3/8	0.0046		0.0013	0.01	0.0062	
PSL	30701744	Hardwood Veneer Dryer: Direct Wood-fired: Heated Zones	Hardwood veneer dryer	HPW, veneer, direct wood-fired, hardwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	0.0052		0.0025	0.0095		
PSL	30701745	Hardwood Veneer Dryer: Direct Wood-fired: Cooling Section	Hardwood veneer dryer	HPW, veneer, direct wood-fired, hardwood (cooling section)	AP-42, CH 10.5 (All EF BDL)							
PSL	30701746	Softwood Veneer Dryer: Direct Wood-fired: Heated Zones	Softwood veneer dryer	SPW, veneer, direct wood-fired, softwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8			0.045			
PSL	30701747	Softwood Veneer Dryer: Direct Wood-fired: Cooling Section	Softwood veneer dryer	SPW, veneer, direct natural gas-fired, softwood (cooling section)	AP-42, Ch 10.5	lb/MSF 3/8	0.0034		0.0015	0.0057	0.01	
PSL	30701748	Hardwood Veneer Dryer: Direct Natural Gas-fired: Heated Zones	Hardwood veneer dryer	HPW, veneer, direct wood-fired, hardwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	0.0052		0.0025	0.0095		
PSL	30701749	Hardwood Veneer Dryer: Direct Natural Gas-fired: Cooling Section	Hardwood veneer dryer	HPW, veneer, direct wood-fired, hardwood (cooling section)	AP-42, CH 10.5 (All EF BDL)							
PSL	30701750	Softwood Veneer Dryer: Direct Natural Gas-fired: Heated Zones	Softwood veneer dryer	SPW, veneer, direct natural gas-fired, softwood (heated zones)	AP-42, Ch 10.5	lb/MSF 3/8	0.062	0.009	0.064	0.036	0.006	0.0016
PSL	30701751	Softwood Veneer Dryer: Direct Natural Gas-fired: Cooling Section	Softwood veneer dryer	SPW, veneer, direct natural gas-fired, softwood (cooling section)	AP-42, Ch 10.5	lb/MSF 3/8	0.0034		0.0015	0.0057	0.01	
PSL	30701752	Veneer Redryer: Radio Frequency-heated: Hardwood	Veneer redryer	SPW, veneer, RF heated, softwood	AP-42, Ch 10.5	lb/MSF 3/8	0.0015		0.00035	0.0027		
PSL	30701753	Veneer Redryer: Radio Frequency-heated: Softwood	Veneer redryer	SPW, veneer, RF heated, softwood	AP-42, Ch 10.5	lb/MSF 3/8	0.0015		0.00035	0.0027		
PSL	30701754	Veneer Redryer: Other: Hardwood	Veneer redryer		No EF for SCC							
PSL	30701755	Veneer Redryer: Other: Softwood	Veneer redryer		No EF for SCC							
PSL	30701760	Press: Phenol Formaldehyde Resin	Engineered wood products press	LVL, press, PF resin	AP-42, Ch 10.9	lb/MCF	0.29		0.29	3.1		0.24
PSL	30701761	Press: Non-Phenol Formaldehyde Resin	Engineered wood products press	LSL Hot press, MDI resin	AP-42, Ch 10.9	lb/MCF			0.029			
PSL	30701765	Hammermill/Chipper: Dry Wood Material	Panel trim chipper	SPW dry trim chipper (chips dry trim from SPW panel saws; process rate = finished board production)	AP-42, Ch 10.5	lb/MSF 3/8				0.0078		
PSL	30701766	Hammermill/Chipper: Mixed Green and Dry Wood Material	Panel trim chipper	SPW dry trim chipper (chips dry trim from SPW panel saws; process rate = finished board production)	AP-42, Ch 10.5	lb/MSF 3/8				0.0078		

PCWP	SCC	SCC Level Four	ICR Process Unit Type	Related AP-42 EF to use in absence of more representative data	EF source	EF units	Acetaldehyde	Acrolein	Formaldehyde	Methanol	Phenol	Propion aldehyde
PSL	30701767	Sanding Operations	Finishing sander	OSB sanderdust metering bin (holds fuel for dryer and thermal oil heater suspension burners)	AP-42, Ch 10.6.1	lb/MSF 3/8				0.00073		
PSL	30701769	Sawing Operations: Dry Veneer and Parallel Strand Lumber (PSL) Trimming	Finishing saw	No EF for SCC	AP-42, Ch 10.9	lb/MLF						
PSL	30701772	Combined Process Unit Type Dust Collection: Dry Wood Material	Other	No EF for SCC	AP-42, Ch 10.9	lb/MLF						
PSL	30701773	Combined Process Unit Type Dust Collection: Mixed Dry and Green	Other	No EF for SCC	AP-42, Ch 10.9	lb/MLF						
PSL	30701774	Log Steaming Vat	Log vat	SPW log steaming vat (process rate = volume of wood removed from vat per hour)	AP-42, Ch 10.5	lb/MSF 3/8	0.0047			0.0073		
PSL	30701776	Resin Storage Tanks	Resin storage tank		No EF for SCC							
PSL	30701777	Miscellaneous Coating Operations	Miscellaneous coating operation		No EF for SCC							
PSL	30701779	Other Not Classified	Other		No EF for SCC							

Notes:

Blanks in pollutant columns indicate there is no emission for the pollutant, either because no emission factor exists or because the emission factor was based on all below-detection limit (BDL) data.

These will be labeled "No EF for pollutant" in the PCWP ICR provisional calculations.

Xylenes include the sum of the m,p-xylene and o-xylene. Cresols include the sum of the m,p-cresol and o-cresol.

Compounds with alias: 1,1,1-Trichloroethane (methyl chloroform), Bromomethane (methyl bromide), Chloroethane (Ethyl chloride), Chloromethane (methyl chloride), MIBK (4-Methyl-2-Pentanone)

Appendix E. Numerical Emission Factors Included in

PCWP	SCC	SCC Level Four	1,1,1-Trichloroethane	Acetophenone	Benzene	Biphenyl	Bis-(2-ethylhexyl phthalate)	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chloroethane	Chloroform	Chloromethane	Cumene	Di-N-butyl phthalate
PB	30700635	Dry Rotary Dryer: Indirect-heated: <600F Inlet air, <30%MC: Softwood													
PB	30700636	Dry Rotary Dryer: Indirect-heated: <600F Inlet air, <30%MC: Hardwood													
PB	30700637	Dry Rotary Dryer: Indirect-heated: <600F Inlet air, <30%MC: Mixed Softwood/Hardwood													
PB	30700641	Former Operations: Urea Formaldehyde Resin													
PB	30700642	Former Operations: Non-Urea Formaldehyde Resin													
PB	30700648	Blender: Urea Formaldehyde Resin													
PB	30700649	Blender: Non-Urea Formaldehyde Resin													
PB	30700651	Reconstituted Wood Products Press: Batch: Urea Formaldehyde Resin			0.003										
PB	30700652	Reconstituted Wood Products Press: Continuous: Urea			0.003										
PB	30700653	Reconstituted Wood Products Press: Continuous: Non-Urea Formaldehyde Resin			0.003										
PB	30700654	Reconstituted Wood Products Press: Batch: Non-Urea Formaldehyde Resin			0.003										
PB	30700656	Agriculture Fiber Board Press													
PB	30700657	Flaker: Hardwood													
PB	30700658	Flaker: Softwood													
PB	30700660	Board Cooler: Non-Urea Formaldehyde Resin													
PB	30700661	Board Cooler: Urea Formaldehyde Resin													
PB	30700662	Refiner: Green Wood Material: Hardwood													
PB	30700663	Refiner: Dry Wood Materials													
PB	30700664	Refiner: Green Wood Material: Softwood													
PB	30700665	Sanding Operations													
PB	30700666	Refiner: Mixed Dry and Green Wood Material													

PCWP	SCC	SCC Level Four	1,1,1-Trichloroethane	Acetophenone	Benzene	Biphenyl	Bis-(2-ethylhexyl phthalate)	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chloroethane	Chloroform	Chloromethane	Cumene	Di-N-butyl phthalate
PB	30700667	Sanding Operations: Urea Formaldehyde Resin													
PB	30700668	Sanding Operations: Non-Urea Formaldehyde Resin													
PB	30700670	Dry Rotary Dryer: Direct Wood-fired: <600F Inlet air, <30%MC: Hardwood	0.000012	0.000064	0.00099	0.000039	0.00032	0.000028	0.000018	0.000012			0.00011	0.000069	0.000023
PB	30700671	Dry Rotary Dryer: Direct Wood-fired: <600F Inlet air, <30%MC: Softwood	0.000012	0.000064	0.00099	0.000039	0.00032	0.000028	0.000018	0.000012			0.00011	0.000069	0.000023
PB	30700672	Dry Rotary Dryer: Direct Wood-fired: <600F Inlet air, <30%MC: Mixed Softwood/Hardwood	0.000012	0.000064	0.00099	0.000039	0.00032	0.000028	0.000018	0.000012			0.00011	0.000069	0.000023
PB	30700673	Dry Rotary Dryer: Direct Natural Gas-fired: <600F Inlet air, <30%MC: Hardwood													
PB	30700674	Dry Rotary Dryer: Direct Natural Gas-fired: <600F Inlet air, <30%MC: Softwood													
PB	30700675	Dry Rotary Dryer: Direct Natural Gas-fired: <600F Inlet air, <30%MC: Mixed Softwood/Hardwood													
PB	30700676	Green Rotary Dryer: Direct Wood-fired: Hardwood			0.0047										
PB	30700677	Green Rotary Dryer: Direct Wood-fired: Softwood			0.0076							0.0001		0.002	
PB	30700678	Green Rotary Dryer: Direct Wood-fired: Mixed Softwood/Hardwood			0.0047										
PB	30700679	Green Rotary Dryer: Direct Natural Gas-fired: Hardwood													
PB	30700680	Green Rotary Dryer: Direct Natural Gas-fired:													
PB	30700681	Green Rotary Dryer: Direct Natural Gas-fired: Mixed Softwood/Hardwood													
PB	30700682	Green Rotary Dryer: Indirect-heated: Hardwood													
PB	30700683	Green Rotary Dryer: Indirect-heated: Softwood													
PB	30700684	Green Rotary Dryer: Indirect-heated: Mixed Softwood/Hardwood													

PCWP	SCC	SCC Level Four	1,1,1-Trichloroethane	Acetophenone	Benzene	Biphenyl	Bis-(2-ethylhexyl phthalate)	Bromo methane	Carbon disulfide	Carbon tetra chloride	Chloro ethane	Chloroform	Chloro methane	Cumene	Di-N-butyl phthalate
PB	30700685	Agriculture Fiber Rotary Dryer													
PB	30700686	Panel Trim Hammermill/Chipper													
PB	30700687	Sawing Operations: Pre-Press: Urea Formaldehyde Resin													
PB	30700688	Sawing Operations: Pre-Press: Non-Urea Formaldehyde Resin													
PB	30700689	Sawing Operations: Post-Press: Pre-Board Cooler: Urea Formaldehyde Resin													
PB	30700690	Sawing Operations: Post-Press: Pre-Board Cooler: Non-Urea Formaldehyde Resin													
PB	30700691	Sawing Operations: Post-Board Cooler: Urea Formaldehyde Resin													
PB	30700692	Sawing Operations: Post-Board Cooler: Non-Urea Formaldehyde Resin													
PB	30700695	Combined Process Unit Type Dust Collection: Dry Wood Material													
PB	30700696	Combined Process Unit Type Dust Collection: Mixed Dry and Green													
PB	30700697	Resin Storage Tanks													
PB	30700698	Miscellaneous Coating Operations													
PB	30700699	Other Not Classified													
plywood	30700702	Sanding Operations													
plywood	30700710	Sawing Operations: Dry Veneer and Plywood Trimming													
plywood	30700720	Veneer Redryer: Steam-heated													
plywood	30700727	Veneer Laying and Glue Spreading													
plywood	30700731	Log Steaming Vat													
plywood	30700732	Resin Storage Tanks													
plywood	30700734	Hardwood Veneer Dryer: Direct Wood-fired: Heated Zones													

PCWP	SCC	SCC Level Four	1,1,1-Trichloroethane	Acetophenone	Benzene	Biphenyl	Bis-(2-ethylhexyl phthalate)	Bromo methane	Carbon disulfide	Carbon tetra chloride	Chloro ethane	Chloroform	Chloro methane	Cumene	Di-N-butyl phthalate
plywood	30700735	Hardwood Veneer Dryer: Direct Wood-fired: Cooling Section													
plywood	30700736	Softwood Veneer Dryer: Direct Wood-fired: Heated Zones													
plywood	30700737	Softwood Veneer Dryer: Direct Wood-fired: Cooling Section													
plywood	30700752	Softwood Veneer Dryer: Direct Natural Gas-fired: Heated Zones			0.0057										
plywood	30700753	Softwood Veneer Dryer: Direct Natural Gas-fired: Cooling Section													
plywood	30700754	Hardwood Veneer Dryer: Direct Natural Gas-fired: Heated Zones													
plywood	30700755	Hardwood Veneer Dryer: Direct Natural Gas-fired: Cooling Section													
plywood	30700756	Hardwood Veneer Dryer: Indirect-heated: Heated Zones													
plywood	30700757	Hardwood Veneer Dryer: Indirect-heated: Cooling Section													
plywood	30700762	Softwood Veneer Dryer: Indirect-heated: Heated Zones			0.00059										
plywood	30700763	Softwood Veneer Dryer: Indirect-heated: Cooling Section													
plywood	30700770	Veneer Redryer: Radio Frequency-heated: Hardwood													
plywood	30700771	Veneer Redryer: Radio Frequency-heated: Softwood													
plywood	30700773	Board Cooler													
plywood	30700777	Combined Process Unit Type Dust Collection: Dry Wood Material													
plywood	30700778	Combined Process Unit Type Dust Collection: Mixed Dry and Green													
plywood	30700782	Press: Non-Phenol Formaldehyde Resin: Softwood													
plywood	30700783	Press: Phenol Formaldehyde Resin:													

PCWP	SCC	SCC Level Four	1,1,1-Trichloroethane	Acetophenone	Benzene	Biphenyl	Bis-(2-ethylhexyl phthalate)	Bromo methane	Carbon disulfide	Carbon tetra chloride	Chloro ethane	Chloroform	Chloro methane	Cumene	Di-N-butyl phthalate
plywood	30700784	Press: Non-Urea Formaldehyde Resin: Hardwood													
plywood	30700785	Press: Urea Formaldehyde Resin: Hardwood													
plywood	30700791	Hammermill/Chipper: Dry Wood Material													
plywood	30700794	Miscellaneous Coating Operations													
plywood	30700799	Other Not Classified													
lumber	30700841	Lumber Kiln: Indirect-heated: Softwood: Pine Species													
lumber	30700842	Lumber Kiln: Indirect-heated: Softwood: Non-Pine Species													
lumber	30700843	Lumber Kiln: Indirect-heated: Hardwood													
lumber	30700844	Lumber Kiln: Direct-fired: Softwood: Pine Species													
lumber	30700845	Lumber Kiln: Direct-fired: Softwood: Non-Pine Species													
lumber	30700846	Lumber Kiln: Direct-fired: Hardwood													
MDF	30700909	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Blowline Blend: Non-Urea Formaldehyde Resin:													
MDF	30700910	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Blowline Blend: Non-Urea Formaldehyde Resin:													
MDF	30700911	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Blowline Blend: Non-Urea Formaldehyde Resin: Mixed													
MDF	30700912	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Blowline Blend: Urea Formaldehyde Resin:													



PCWP	SCC	SCC Level Four	1,1,1-Trichloroethane	Acetophenone	Benzene	Biphenyl	Bis-(2-ethylhexyl phthalate)	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chloroethane	Chloroform	Chloromethane	Cumene	Di-N-butyl phthalate
MDF	30700913	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Blowline Blend: Urea Formaldehyde Resin:													
MDF	30700914	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Blowline Blend: Urea Formaldehyde Resin:													
MDF	30700915	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Non-Blowline Blend:													
MDF	30700916	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Non-Blowline Blend:													
MDF	30700917	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Non-Blowline Blend: Mixed													
MDF	30700918	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Non-Urea Formaldehyde Resin:													
MDF	30700919	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Non-Urea Formaldehyde Resin:													
MDF	30700920	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Non-Urea Formaldehyde Resin:													
MDF	30700923	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Urea Formaldehyde Resin:													
MDF	30700924	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Urea Formaldehyde Resin:													
MDF	30700925	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Urea Formaldehyde Resin:													

PCWP	SCC	SCC Level Four	1,1,1-Trichloroethane	Acetophenone	Benzene	Biphenyl	Bis-(2-ethylhexyl phthalate)	Bromo methane	Carbon disulfide	Carbon tetra chloride	Chloro ethane	Chloroform	Chloro methane	Cumene	Di-N-butyl phthalate
MDF	30700926	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Non-Blowline Blend:													
MDF	30700927	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Non-Blowline Blend:													
MDF	30700928	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Non-Blowline Blend: Mixed													
MDF	30700929	Pressurized Refiner/Primary Tube Dryer: Indirect-heated: Blowline Blend: Non-Urea Formaldehyde Resin:													
MDF	30700930	Pressurized Refiner/Primary Tube Dryer: Indirect-heated: Blowline Blend: Non-Urea Formaldehyde Resin:													
MDF	30700932	Pressurized Refiner/Primary Tube Dryer: Indirect-heated: Blowline Blend: Urea Formaldehyde Resin:													
MDF	30700934	Pressurized Refiner/Primary Tube Dryer: Indirect-heated: Blowline Blend: Non-Urea Formaldehyde Resin:													
MDF	30700936	Pressurized Refiner/Primary Tube Dryer: Indirect-heated: Blowline Blend: Urea Formaldehyde Resin:													
MDF	30700939	Pressurized Refiner/Primary Tube Dryer: Indirect-heated: Blowline Blend: Urea Formaldehyde Resin:													
MDF	30700942	Secondary Tube Dryer: All Indirect-fired Units			0.00073										
MDF	30700943	Secondary Tube Dryer: All Direct-fired Units													
MDF	30700946	Fiber Dryers: Other													
MDF	30700947	Agriculture Fiber Rotary Dryer													
MDF	30700950	Reconstituted Wood Products Press: Continuous: Urea													

PCWP	SCC	SCC Level Four	1,1,1-Trichloroethane	Acetophenone	Benzene	Biphenyl	Bis-(2-ethylhexyl phthalate)	Bromo methane	Carbon disulfide	Carbon tetra chloride	Chloro ethane	Chloroform	Chloro methane	Cumene	Di-N-butyl phthalate
MDF	30700951	Reconstituted Wood Products Press: Continuous: Non-Urea Formaldehyde Resin													
MDF	30700960	Reconstituted Wood Products Press: Batch: Urea Formaldehyde Resin													
MDF	30700961	Reconstituted Wood Products Press: Batch: Non-Urea Formaldehyde Resin													
MDF	30700962	Agriculture Fiber Board Press													
MDF	30700971	Board Cooler: Urea Formaldehyde Resin													
MDF	30700972	Board Cooler: Non-Urea Formaldehyde Resin													
MDF	30700977	Former Without Blowline Blend: Non-Urea Formaldehyde Resin													
MDF	30700978	Former With Blowline Blend: Non-Urea Formaldehyde Resin													
MDF	30700979	Blender: Non-Urea Formaldehyde Resin													
MDF	30700980	Blender: Urea Formaldehyde Resin													
MDF	30700981	Former Without Blowline Blend: Urea Formaldehyde Resin													
MDF	30700982	Former With Blowline Blend: Urea Formaldehyde Resin													
MDF	30700983	Sanding Operations: Urea Formaldehyde Resin													
MDF	30700984	Sawing Operations: Pre-Press: Urea Formaldehyde Resin													
MDF	30700985	Sanding Operations: Non-Urea Formaldehyde Resin													
MDF	30700986	Sawing Operations: Pre-Press: Non-Urea Formaldehyde Resin													
MDF	30700987	Sawing Operations: Post-Board Cooler: Urea Formaldehyde Resin													
MDF	30700988	Sawing Operations: Post-Board Cooler: Non-Urea Formaldehyde Resin													
MDF	30700989	Sawing Operations: Post-Press: Pre-Board Cooler: Urea Formaldehyde Resin													
MDF	30700990	Sawing Operations: Post-Press: Pre-Board Cooler: Non-Urea Formaldehyde Resin													

PCWP	SCC	SCC Level Four	1,1,1-Trichloroethane	Acetophenone	Benzene	Biphenyl	Bis-(2-ethylhexyl phthalate)	Bromo methane	Carbon disulfide	Carbon tetra chloride	Chloro ethane	Chloroform	Chloro methane	Cumene	Di-N-butyl phthalate
MDF	30700991	Panel Trim Hammermill/Chipper													
MDF	30700994	Combined Process Unit Type Dust Collection: Dry Wood Material													
MDF	30700995	Combined Process Unit Type Dust Collection: Mixed Dry and Green													
MDF	30700996	Resin Storage Tanks													
MDF	30700997	Miscellaneous Coating Operations													
MDF	30700999	Other Not Classified													
OSB	30701009	Rotary Strand Dryer: Direct Wood-fired: Softwood			0.0067									0.055	
OSB	30701010	Rotary Strand Dryer: Direct Wood-fired: Hardwood			0.01										
OSB	30701015	Rotary Strand Dryer: Direct Wood-fired: Mixed Softwood/Hardwood													
OSB	30701020	Rotary Strand Dryer: Direct Natural Gas-fired: Hardwood													
OSB	30701021	Rotary Strand Dryer: Direct Natural Gas-fired:			0.0067									0.055	
OSB	30701022	Rotary Strand Dryer: Direct Natural Gas-fired: Mixed Softwood/Hardwood													
OSB	30701030	Rotary Strand Dryer: Indirect-heated: Hardwood													
OSB	30701031	Rotary Strand Dryer: Indirect-heated: Softwood			0.0067									0.055	
OSB	30701032	Rotary Strand Dryer: Indirect-heated: Mixed Softwood/Hardwood													
OSB	30701039	Indirect-heated Conveyor Dryer, Softwood													
OSB	30701040	Conveyor Dryer: Heated Zones: Hardwood													
OSB	30701041	Conveyor Dryer: Heated Zones: Softwood													
OSB	30701042	Conveyor Dryer: Heated Zones: Mixed Hardwood/Softwood													
OSB	30701043	Conveyor Dryer: Unheated Zones: All Species													
OSB	30701053	Reconstituted Wood Products Press: Phenol Formaldehyde Resin													

PCWP	SCC	SCC Level Four	1,1,1-Trichloroethane	Acetophenone	Benzene	Biphenyl	Bis-(2-ethylhexyl phthalate)	Bromo methane	Carbon disulfide	Carbon tetra chloride	Chloro ethane	Chloroform	Chloro methane	Cumene	Di-N-butyl phthalate
OSB	30701055	Reconstituted Wood Products Press: Methylene Diphenyl Diisocyanate (MDI) Resin													
OSB	30701057	Reconstituted Wood Products Press: Phenol Formaldehyde Resin (surface layers)/ Methylene Diphenyl Diisocyanate (MDI) Resin													
OSB	30701058	Reconstituted Wood Products Press													
OSB	30701062	Sanding Operations													
OSB	30701064	Storage Bins: Trimming and Dryer Exhaust Cyclone Dust													
OSB	30701067	Combined Process Unit Type Dust Collection: Dry Wood Material													
OSB	30701068	Combined Process Unit Type Dust Collection: Mixed Dry and Green Wood Material													
OSB	30701070	Blender: Phenol Formaldehyde Resin													
OSB	30701071	Blender: Methylene Diphenyl Diisocyanate (MDI) Resin													
OSB	30701072	Former: Phenol Formaldehyde Resin													
OSB	30701073	Former Operations: Methylene Diphenyl Diisocyanate (MDI) Resin													
OSB	30701074	Former Operations: Phenol Formaldehyde Resin/Methylene Diphenyl Diisocyanate (MDI) Resin													
OSB	30701084	Hammermill/Chipper: Dry Wood Material													
OSB	30701085	Hammermill/Chipper: Mixed Green and Dry Wood Material													
OSB	30701086	Miscellaneous Coating Operations													
OSB	30701087	Resin Storage Tanks													

PCWP	SCC	SCC Level Four	1,1,1-Trichloroethane	Acetophenone	Benzene	Biphenyl	Bis-(2-ethylhexyl phthalate)	Bromo methane	Carbon disulfide	Carbon tetra chloride	Chloro ethane	Chloroform	Chloro methane	Cumene	Di-N-butyl phthalate
OSB	30701090	Sawing Operations: Pre-Press Mat Trimming: Phenol Formaldehyde													
OSB	30701091	Sawing Operations: Pre-Press Mat Trimming: Methylene Diphenyl Diisocyanate (MDI) Resin													
OSB	30701092	Sawing Operations: Pre-Press Mat Trimming: Phenol Formaldehyde Resin/Methylene Diphenyl Diisocyanate (MDI) Resin													
OSB	30701093	Sawing Operations: Post-Press Panel Trimming: Phenol Formaldehyde													
OSB	30701094	Sawing Operations: Post-Press Panel Trimming: Methylene Diphenyl Diisocyanate (MDI) Resin													
OSB	30701095	Sawing Operations: Post-Press Panel Trimming: Phenol Formaldehyde Resin/Methylene Diphenyl Diisocyanate (MDI) Resin													
OSB	30701099	Other Not Classified													
HB	30701401	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Non-Phenol Formaldehyde													
HB	30701402	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Non-Phenol Formaldehyde													
HB	30701403	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Non-Phenol Formaldehyde													
HB	30701404	Pressurized Refiner/Primary Tube Dryer: Natural Gas-fired: Blowline Blend: Non-Phenol Formaldehyde			0.000088								0.000019		
HB	30701405	Pressurized Refiner/Primary Tube Dryer: Natural Gas-fired: Blowline Blend: Non-Phenol Formaldehyde			0.000088								0.000019		

PCWP	SCC	SCC Level Four	1,1,1-Trichloroethane	Acetophenone	Benzene	Biphenyl	Bis-(2-ethylhexyl phthalate)	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chloroethane	Chloroform	Chloromethane	Cumene	Di-N-butyl phthalate
HB	30701406	Pressurized Refiner/Primary Tube Dryer: Natural Gas-fired: Blowline Blend: Non-Phenol Formaldehyde			0.000088								0.000019		
HB	30701407	Pressurized Refiner/Primary Tube Dryer: Indirect-fired: Blowline Blend: Phenol Formaldehyde Resin:			0.000088								0.000019		
HB	30701408	Pressurized Refiner/Primary Tube Dryer: Indirect-fired: Blowline Blend: Phenol Formaldehyde Resin:			0.000088								0.000019		
HB	30701409	Pressurized Refiner/Primary Tube Dryer: Indirect-fired: Blowline Blend: Phenol Formaldehyde Resin:			0.000088								0.000019		
HB	30701410	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Phenol Formaldehyde Resin:													
HB	30701411	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Phenol Formaldehyde Resin:													
HB	30701412	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Phenol Formaldehyde Resin:													
HB	30701413	Pressurized Refiner/Primary Tube Dryer: Natural Gas-fired: Blowline Blend: Phenol Formaldehyde Resin:			0.000088								0.000019		
HB	30701414	Pressurized Refiner/Primary Tube Dryer: Natural Gas-fired: Blowline Blend: Phenol Formaldehyde Resin:			0.000088								0.000019		
HB	30701415	Pressurized Refiner/Primary Tube Dryer: Natural Gas-fired: Blowline Blend: Phenol Formaldehyde Resin:			0.000088								0.000019		

PCWP	SCC	SCC Level Four	1,1,1-Trichloroethane	Acetophenone	Benzene	Biphenyl	Bis-(2-ethylhexyl phthalate)	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chloroethane	Chloroform	Chloromethane	Cumene	Di-N-butyl phthalate
HB	30701417	Pressurized Refiner/Primary Tube Dryer: Indirect-fired: Blowline Blend: Non-Phenol Formaldehyde			0.000088								0.000019		
HB	30701418	Pressurized Refiner/Primary Tube Dryer: Indirect-fired: Blowline Blend: Non-Phenol Formaldehyde			0.000088								0.000019		
HB	30701419	Pressurized Refiner/Primary Tube Dryer: Indirect-fired: Blowline Blend: Non-Phenol Formaldehyde			0.000088								0.000019		
HB	30701421	Hardboard Oven													
HB	30701423	Secondary Tube Dryer: All Direct-fired Units													
HB	30701424	Secondary Tube Dryer: All Indirect-fired Units													
HB	30701426	Fiber Dryers: Other													
HB	30701427	Press Pre-Dryer: Phenol Formaldehyde Resin													
HB	30701428	Press Pre-Dryer: Non-Phenol Formaldehyde Resin			0.0021										
HB	30701431	Humidifier			0.0000062						0.000014		0.00012		
HB	30701441	Dry Hardboard Press: Phenol Formaldehyde													
HB	30701443	Dry Hardboard Press: Non-Phenol Formaldehyde													
HB	30701444	Wet Hardboard Press: Phenol Formaldehyde													
HB	30701445	Wet Hardboard Press: Non-Phenol Formaldehyde													
HB	30701450	Blender: Phenol Formaldehyde Resin													
HB	30701451	Blender: Non-Phenol Formaldehyde Resin													
HB	30701452	Fiber Washer													
HB	30701455	Digester: Softwood													
HB	30701456	Digester: Hardwood													
HB	30701457	Digester: Mixed Softwood/Hardwood													
HB	30701460	Atmospheric Refiner: Softwood												0.0034	



PCWP	SCC	SCC Level Four	1,1,1-Trichloroethane	Acetophenone	Benzene	Biphenyl	Bis-(2-ethylhexyl phthalate)	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chloroethane	Chloroform	Chloromethane	Cumene	Di-N-butyl phthalate
HB	30701461	Atmospheric Refiner: Hardwood												0.0034	
HB	30701462	Atmospheric Refiner: Mixed												0.0034	
HB	30701463	Pressurized Refiner: Softwood													
HB	30701464	Pressurized Refiner: Hardwood													
HB	30701465	Pressurized Refiner: Mixed Softwood/Hardwood													
HB	30701466	Pressurized Digester/Refiner: Softwood													
HB	30701467	Pressurized Digester/Refiner:													
HB	30701468	Pressurized Digester/Refiner: Mixed Softwood/Hardwood													
HB	30701480	Sanding Operations													
HB	30701481	Sawing Operations													
HB	30701485	Wet Hardboard Former: Vacuum System: Non-Phenol Formaldehyde													
HB	30701486	Wet Hardboard Former: Vacuum System: Phenol Formaldehyde Resin													
HB	30701487	Dry Process Former Operations: Dust Collection: Phenol													
HB	30701488	Dry Process Former Operations: Dust Collection: Non-Phenol Formaldehyde Resin													
HB	30701489	Wet Process Former Operations: Dust (Fiber) Collection: Phenol Formaldehyde Resin													
HB	30701490	Wet Process Former Operations: Dust (Fiber) Collection: Non-Phenol Formaldehyde Resin													
HB	30701493	Combined Process Unit Type Dust Collection: Dry Wood Material													
HB	30701494	Combined Process Unit Type Dust Collection: Mixed Dry and Green													
HB	30701495	Panel Trim Chipper													
HB	30701496	Miscellaneous Coating Operations													

PCWP	SCC	SCC Level Four	1,1,1-Trichloroethane	Acetophenone	Benzene	Biphenyl	Bis-(2-ethylhexyl phthalate)	Bromo methane	Carbon disulfide	Carbon tetra chloride	Chloro ethane	Chloroform	Chloro methane	Cumene	Di-N-butyl phthalate
HB	30701497	Resin Storage Tanks													
HB	30701499	Other Not Classified													
FB	30701513	Mat Dryer: Indirect-heated: Starch binder: Softwood													
FB	30701514	Mat Dryer: Indirect-heated: Starch binder: Hardwood													
FB	30701515	Mat Dryer: Indirect-heated: Starch binder: Mixed													
FB	30701516	Mat Dryer: Indirect-heated: Asphalt binder: Softwood													
FB	30701517	Mat Dryer: Indirect-heated: Asphalt binder: Hardwood													
FB	30701518	Mat Dryer: Indirect-heated: Asphalt binder: Mixed													
FB	30701519	Mat Dryer: Direct-heated: Starch binder: Softwood													
FB	30701520	Mat Dryer: Direct-heated: Starch binder: Hardwood													
FB	30701521	Mat Dryer: Direct-heated: Starch binder: Mixed Softwood/Hardwood													
FB	30701522	Mat Dryer: Direct-heated: Asphalt binder: Softwood													
FB	30701523	Mat Dryer: Direct-heated: Asphalt binder: Hardwood													
FB	30701524	Mat Dryer: Direct-heated: Asphalt binder: Mixed Softwood/Hardwood													
FB	30701528	Atmospheric Refiner: Hardwood												0.0034	
FB	30701529	Atmospheric Refiner: Mixed												0.0034	
FB	30701530	Atmospheric Refiner: Softwood												0.0034	
FB	30701531	Pressurized Refiner: Softwood													
FB	30701532	Pressurized Refiner: Hardwood													
FB	30701533	Pressurized Refiner: Mixed Softwood/Hardwood													
FB	30701534	Digester: Softwood													

PCWP	SCC	SCC Level Four	1,1,1-Trichloroethane	Acetophenone	Benzene	Biphenyl	Bis-(2-ethylhexyl phthalate)	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chloroethane	Chloroform	Chloromethane	Cumene	Di-N-butyl phthalate
FB	30701535	Digester: Hardwood													
FB	30701536	Digester: Mixed Softwood/Hardwood													
FB	30701537	Pressurized Digester/Refiner: Softwood													
FB	30701538	Pressurized Digester/Refiner:													
FB	30701539	Pressurized Digester/Refiner: Mixed Softwood/Hardwood													
FB	30701540	Fiber Washer: Softwood													
FB	30701541	Fiber Washer: Hardwood													
FB	30701542	Fiber Washer: Mixed Softwood/Hardwood													
FB	30701551	Wet Fiberboard Former: Vacuum: All Binder													
FB	30701561	Panel Trim Chipper													
FB	30701562	Sawing Operations													
FB	30701567	Combined Process Unit Type Dust Collection: Dry Wood Material													
FB	30701568	Combined Process Unit Type Dust Collection: Mixed Dry and Green													
FB	30701591	Miscellaneous Coating Operations													
FB	30701592	Resin Storage Tanks													
FB	30701599	Other Not Classified													
LVL	30701601	Hardwood Veneer Dryer: Indirect-heated: Heated Zones													
LVL	30701602	Hardwood Veneer Dryer: Indirect-heated: Cooling Section													
LVL	30701603	Softwood Veneer Dryer: Indirect-heated: Heated Zones			0.00059										
LVL	30701604	Softwood Veneer Dryer: Indirect-heated: Cooling Section													
LVL	30701605	Hardwood Veneer Dryer: Direct Wood-fired: Heated Zones													
LVL	30701606	Hardwood Veneer Dryer: Direct Wood-fired: Cooling Section													

PCWP	SCC	SCC Level Four	1,1,1-Trichloroethane	Acetophenone	Benzene	Biphenyl	Bis-(2-ethylhexyl phthalate)	Bromo methane	Carbon disulfide	Carbon tetra chloride	Chloro ethane	Chloroform	Chloro methane	Cumene	Di-N-butyl phthalate
LVL	30701607	Softwood Veneer Dryer: Direct Wood-fired: Heated Zones													
LVL	30701608	Softwood Veneer Dryer: Direct Wood-fired: Cooling Section													
LVL	30701609	Hardwood Veneer Dryer: Direct Natural Gas-fired: Heated Zones													
LVL	30701610	Hardwood Veneer Dryer: Direct Natural Gas-fired: Cooling Section													
LVL	30701611	Softwood Veneer Dryer: Direct Natural Gas-fired: Heated Zones			0.0057										
LVL	30701612	Press: Phenol Formaldehyde Resin													
LVL	30701613	Softwood Veneer Dryer: Direct Natural Gas-fired: Cooling Section													
LVL	30701614	Press: Non-Phenol Formaldehyde Resin													
LVL	30701615	Veneer Redryer: Radio Frequency-heated: Softwood													
LVL	30701616	Veneer Redryer: Radio Frequency-heated: Hardwood													
LVL	30701617	Veneer Redryer: Non-RF Heat: Softwood													
LVL	30701618	Veneer Redryer: Non-RF Heat: Hardwood													
LVL	30701619	Sanding Operations													
LVL	30701623	Hammermill/Chipper: Dry Wood Material													
LVL	30701624	Hammermill/Chipper: Mixed Green and Dry Wood Material													
LVL	30701627	Sawing Operations: Dry Veneer and Laminated Veneer Lumber (LVL) Trimming													
LVL	30701628	Log Steaming Vat													
LVL	30701629	Resin Storage Tanks													
LVL	30701633	Combined Process Unit Type Dust Collection: Dry Wood Material													

PCWP	SCC	SCC Level Four	1,1,1-Trichloroethane	Acetophenone	Benzene	Biphenyl	Bis-(2-ethylhexyl phthalate)	Bromo methane	Carbon disulfide	Carbon tetrachloride	Chloroethane	Chloroform	Chloro methane	Cumene	Di-N-butyl phthalate
LVL	30701634	Combined Process Unit Type Dust Collection: Mixed Dry and Green													
LVL	30701635	Miscellaneous Coating Operations													
LVL	30701639	Other Not Classified													
Ijoist	30701670	Curing Chamber													
Ijoist	30701671	Resin Storage Tanks													
Ijoist	30701672	Sawing Operations													
Ijoist	30701679	Other Not Classified													
GLULAM	30701680	Press/Curing Chamber: Phenol-Resorcinol-Formaldehyde (PRF) resin													
GLULAM	30701681	Press/Curing Chamber: Non-Phenol-Resorcinol-Formaldehyde (PRF) Resin													
GLULAM	30701682	Resin Storage Tanks													
GLULAM	30701683	Chippers													
GLULAM	30701684	Sanding Operations													
GLULAM	30701685	Sawing Operations													
GLULAM	30701689	Other Not Classified													
LSL	30701701	Rotary Strand Dryer: Direct Wood-fired: Hardwood													
LSL	30701702	Rotary Strand Dryer: Direct Wood-fired: Softwood													
LSL	30701703	Rotary Strand Dryer: Direct Wood-fired: Mixed Softwood/Hardwood													
LSL	30701704	Rotary Strand Dryer: Direct Natural Gas-fired:													
LSL	30701705	Rotary Strand Dryer: Direct Natural Gas-fired: Hardwood													
LSL	30701706	Rotary Strand Dryer: Direct Natural Gas-fired: Mixed Softwood/Hardwood													
LSL	30701707	Rotary Strand Dryer: Indirect-heated: Softwood													
LSL	30701708	Rotary Strand Dryer: Indirect-heated: Hardwood													
LSL	30701709	Rotary Strand Dryer: Indirect-heated: Mixed Softwood/Hardwood													

PCWP	SCC	SCC Level Four	1,1,1-Trichloroethane	Acetophenone	Benzene	Biphenyl	Bis-(2-ethylhexyl phthalate)	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chloroethane	Chloroform	Chloromethane	Cumene	Di-N-butyl phthalate
LSL	30701710	Conveyor Dryer: Heated Zones: Hardwood													
LSL	30701711	Conveyor Dryer: Heated Zones: Softwood													
LSL	30701712	Conveyor Dryer: Heated Zones: Mixed Hardwood/Softwood													
LSL	30701713	Conveyor Dryer: Unheated Zones: All Species													
LSL	30701720	Press: Methylene Diphenyl Diisocyanate (MDI) Adhesive													
LSL	30701721	Press: Non-Methylene Diphenyl Diisocyanate (MDI) Adhesive													
LSL	30701722	Blender: Methylene Diphenyl Diisocyanate (MDI) Adhesive													
LSL	30701723	Blender: Non-Methylene Diphenyl Diisocyanate (MDI) Adhesive													
LSL	30701724	Former Operations: Methylene Diphenyl Diisocyanate (MDI) Adhesive													
LSL	30701725	Former Operations: Non- Methylene Diphenyl Diisocyanate (MDI) Adhesive													
LSL	30701730	Sanding Operations													
LSL	30701731	Sawing Operations													
LSL	30701735	Hammermill/Chipper: Dry Wood Material													
LSL	30701736	Hammermill/Chipper: Mixed Green and Dry Wood Material													
LSL	30701737	Resin Storage Tanks													
LSL	30701739	Other Not Classified													
PSL	30701740	Hardwood Veneer Dryer: Indirect-heated: Heated Zones													
PSL	30701741	Hardwood Veneer Dryer: Indirect-heated: Cooling Section													

PCWP	SCC	SCC Level Four	1,1,1-Trichloroethane	Acetophenone	Benzene	Biphenyl	Bis-(2-ethylhexyl phthalate)	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chloroethane	Chloroform	Chloromethane	Cumene	Di-N-butyl phthalate
PSL	30701742	Softwood Veneer Dryer: Indirect-heated: Heated Zones			0.00059										
PSL	30701743	Softwood Veneer Dryer: Indirect-heated: Cooling Section													
PSL	30701744	Hardwood Veneer Dryer: Direct Wood-fired: Heated Zones													
PSL	30701745	Hardwood Veneer Dryer: Direct Wood-fired: Cooling Section													
PSL	30701746	Softwood Veneer Dryer: Direct Wood-fired: Heated Zones													
PSL	30701747	Softwood Veneer Dryer: Direct Wood-fired: Cooling Section													
PSL	30701748	Hardwood Veneer Dryer: Direct Natural Gas-fired: Heated Zones													
PSL	30701749	Hardwood Veneer Dryer: Direct Natural Gas-fired: Cooling Section													
PSL	30701750	Softwood Veneer Dryer: Direct Natural Gas-fired: Heated Zones			0.0057										
PSL	30701751	Softwood Veneer Dryer: Direct Natural Gas-fired: Cooling Section													
PSL	30701752	Veneer Redryer: Radio Frequency-heated: Hardwood													
PSL	30701753	Veneer Redryer: Radio Frequency-heated: Softwood													
PSL	30701754	Veneer Redryer: Other: Hardwood													
PSL	30701755	Veneer Redryer: Other: Softwood													
PSL	30701760	Press: Phenol Formaldehyde Resin													
PSL	30701761	Press: Non-Phenol Formaldehyde Resin													
PSL	30701765	Hammermill/Chipper: Dry Wood Material													
PSL	30701766	Hammermill/Chipper: Mixed Green and Dry Wood Material													

PCWP	SCC	SCC Level Four	1,1,1-Trichloroethane	Acetophenone	Benzene	Biphenyl	Bis-(2-ethylhexyl phthalate)	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chloroethane	Chloroform	Chloromethane	Cumene	Di-N-butyl phthalate
PSL	30701767	Sanding Operations													
PSL	30701769	Sawing Operations: Dry Veneer and Parallel Strand Lumber (PSL) Trimming													
PSL	30701772	Combined Process Unit Type Dust Collection: Dry Wood Material													
PSL	30701773	Combined Process Unit Type Dust Collection: Mixed Dry and Green													
PSL	30701774	Log Steaming Vat													
PSL	30701776	Resin Storage Tanks													
PSL	30701777	Miscellaneous Coating Operations													
PSL	30701779	Other Not Classified													



Appendix E. Numerical Emission Factors Included in

PCWP	SCC	SCC Level Four	Ethyl benzene	Hydroquinone	MDI	MIBK	Methylene chloride	n-Hexane	Styrene	Toluene	Xylenes	Cresols	Metals emission factors from Table 3 applied (lb/MMBtu)
PB	30700635	Dry Rotary Dryer: Indirect-heated: <600F Inlet air, <30%MC: Softwood											
PB	30700636	Dry Rotary Dryer: Indirect-heated: <600F Inlet air, <30%MC: Hardwood											
PB	30700637	Dry Rotary Dryer: Indirect-heated: <600F Inlet air, <30%MC: Mixed Softwood/Hardwood											
PB	30700641	Former Operations: Urea Formaldehyde Resin											
PB	30700642	Former Operations: Non-Urea Formaldehyde Resin											
PB	30700648	Blender: Urea Formaldehyde Resin											
PB	30700649	Blender: Non-Urea Formaldehyde Resin											
PB	30700651	Reconstituted Wood Products Press: Batch: Urea Formaldehyde Resin					0.0099						
PB	30700652	Reconstituted Wood Products Press: Continuous: Urea					0.0099						
PB	30700653	Reconstituted Wood Products Press: Continuous: Non-Urea Formaldehyde Resin					0.0099						
PB	30700654	Reconstituted Wood Products Press: Batch: Non-Urea Formaldehyde Resin					0.0099						
PB	30700656	Agriculture Fiber Board Press											
PB	30700657	Flaker: Hardwood											
PB	30700658	Flaker: Softwood											
PB	30700660	Board Cooler: Non-Urea Formaldehyde Resin					0.0032						
PB	30700661	Board Cooler: Urea Formaldehyde Resin					0.0032						
PB	30700662	Refiner: Green Wood Material: Hardwood											
PB	30700663	Refiner: Dry Wood Materials											
PB	30700664	Refiner: Green Wood Material: Softwood											
PB	30700665	Sanding Operations											
PB	30700666	Refiner: Mixed Dry and Green Wood Material											

PCWP	SCC	SCC Level Four	Ethyl benzene	Hydroquinone	MDI	MIBK	Methylene chloride	n-Hexane	Styrene	Toluene	Xylenes	Cresols	Metals emission factors from Table 3 applied (lb/MMBtu)
PB	30700667	Sanding Operations: Urea Formaldehyde Resin											
PB	30700668	Sanding Operations: Non-Urea Formaldehyde Resin											
PB	30700670	Dry Rotary Dryer: Direct Wood-fired: <600F Inlet air, <30%MC: Hardwood	0.0000038	0.00006		0.0024	0.00063	0.000026	0.00012	0.0021	0.00067		Yes
PB	30700671	Dry Rotary Dryer: Direct Wood-fired: <600F Inlet air, <30%MC: Softwood	0.0000038	0.00006		0.0024	0.00063	0.000026	0.00012	0.0021	0.00067		Yes
PB	30700672	Dry Rotary Dryer: Direct Wood-fired: <600F Inlet air, <30%MC: Mixed Softwood/Hardwood	0.0000038	0.00006		0.0024	0.00063	0.000026	0.00012	0.0021	0.00067		Yes
PB	30700673	Dry Rotary Dryer: Direct Natural Gas-fired: <600F Inlet air, <30%MC: Hardwood											
PB	30700674	Dry Rotary Dryer: Direct Natural Gas-fired: <600F Inlet air, <30%MC: Softwood											
PB	30700675	Dry Rotary Dryer: Direct Natural Gas-fired: <600F Inlet air, <30%MC: Mixed Softwood/Hardwood											
PB	30700676	Green Rotary Dryer: Direct Wood-fired: Hardwood					0.0014		0.00057	0.0059	0.00638		Yes
PB	30700677	Green Rotary Dryer: Direct Wood-fired: Softwood				0.0069	0.0018		0.00036	0.013	0.0093		Yes
PB	30700678	Green Rotary Dryer: Direct Wood-fired: Mixed Softwood/Hardwood					0.0014		0.00057	0.0059	0.00638		Yes
PB	30700679	Green Rotary Dryer: Direct Natural Gas-fired: Hardwood											
PB	30700680	Green Rotary Dryer: Direct Natural Gas-fired:											
PB	30700681	Green Rotary Dryer: Direct Natural Gas-fired: Mixed Softwood/Hardwood											
PB	30700682	Green Rotary Dryer: Indirect-heated: Hardwood											
PB	30700683	Green Rotary Dryer: Indirect-heated: Softwood											
PB	30700684	Green Rotary Dryer: Indirect-heated: Mixed Softwood/Hardwood											

PCWP	SCC	SCC Level Four	Ethyl benzene	Hydroquinone	MDI	MIBK	Methylene chloride	n-Hexane	Styrene	Toluene	Xylenes	Cresols	Metals emission factors from Table 3 applied (lb/MMBtu)
PB	30700685	Agriculture Fiber Rotary Dryer											
PB	30700686	Panel Trim Hammermill/Chipper											
PB	30700687	Sawing Operations: Pre-Press: Urea Formaldehyde Resin											
PB	30700688	Sawing Operations: Pre-Press: Non-Urea Formaldehyde Resin											
PB	30700689	Sawing Operations: Post-Press: Pre-Board Cooler: Urea Formaldehyde Resin											
PB	30700690	Sawing Operations: Post-Press: Pre-Board Cooler: Non-Urea Formaldehyde Resin											
PB	30700691	Sawing Operations: Post-Board Cooler: Urea Formaldehyde Resin											
PB	30700692	Sawing Operations: Post-Board Cooler: Non-Urea Formaldehyde Resin											
PB	30700695	Combined Process Unit Type Dust Collection: Dry Wood Material											
PB	30700696	Combined Process Unit Type Dust Collection: Mixed Dry and Green											
PB	30700697	Resin Storage Tanks											
PB	30700698	Miscellaneous Coating Operations											
PB	30700699	Other Not Classified											
plywood	30700702	Sanding Operations											
plywood	30700710	Sawing Operations: Dry Veneer and Plywood Trimming											
plywood	30700720	Veneer Redryer: Steam-heated											
plywood	30700727	Veneer Laying and Glue Spreading											
plywood	30700731	Log Steaming Vat											
plywood	30700732	Resin Storage Tanks											
plywood	30700734	Hardwood Veneer Dryer: Direct Wood-fired: Heated Zones											Yes

PCWP	SCC	SCC Level Four	Ethyl benzene	Hydroquinone	MDI	MIBK	Methylene chloride	n-Hexane	Styrene	Toluene	Xylenes	Cresols	Metals emission factors from Table 3 applied (lb/MMBtu)
plywood	30700735	Hardwood Veneer Dryer: Direct Wood-fired: Cooling Section											
plywood	30700736	Softwood Veneer Dryer: Direct Wood-fired: Heated Zones											Yes
plywood	30700737	Softwood Veneer Dryer: Direct Wood-fired: Cooling Section											
plywood	30700752	Softwood Veneer Dryer: Direct Natural Gas-fired: Heated Zones				0.0026			0.0015	0.0074	0.0039		
plywood	30700753	Softwood Veneer Dryer: Direct Natural Gas-fired: Cooling Section											
plywood	30700754	Hardwood Veneer Dryer: Direct Natural Gas-fired: Heated Zones											
plywood	30700755	Hardwood Veneer Dryer: Direct Natural Gas-fired: Cooling Section											
plywood	30700756	Hardwood Veneer Dryer: Indirect-heated: Heated Zones				0.0022							
plywood	30700757	Hardwood Veneer Dryer: Indirect-heated: Cooling Section				0.029							
plywood	30700762	Softwood Veneer Dryer: Indirect-heated: Heated Zones				0.0015				0.0011	0.00075		
plywood	30700763	Softwood Veneer Dryer: Indirect-heated: Cooling Section				0.0054					0.0033		
plywood	30700770	Veneer Redryer: Radio Frequency-heated: Hardwood											
plywood	30700771	Veneer Redryer: Radio Frequency-heated: Softwood											
plywood	30700773	Board Cooler											
plywood	30700777	Combined Process Unit Type Dust Collection: Dry Wood Material											
plywood	30700778	Combined Process Unit Type Dust Collection: Mixed Dry and Green											
plywood	30700782	Press: Non-Phenol Formaldehyde Resin: Softwood				0.00071							
plywood	30700783	Press: Phenol Formaldehyde Resin:				0.00071							

PCWP	SCC	SCC Level Four	Ethyl benzene	Hydroquinone	MDI	MIBK	Methylene chloride	n-Hexane	Styrene	Toluene	Xylenes	Cresols	Metals emission factors from Table 3 applied (lb/MMBtu)
plywood	30700784	Press: Non-Urea Formaldehyde Resin: Hardwood											
plywood	30700785	Press: Urea Formaldehyde Resin: Hardwood				0.0057							
plywood	30700791	Hammermill/Chipper: Dry Wood Material											
plywood	30700794	Miscellaneous Coating Operations											
plywood	30700799	Other Not Classified											
lumber	30700841	Lumber Kiln: Indirect-heated: Softwood: Pine Species											
lumber	30700842	Lumber Kiln: Indirect-heated: Softwood: Non-Pine Species											
lumber	30700843	Lumber Kiln: Indirect-heated: Hardwood											
lumber	30700844	Lumber Kiln: Direct-fired: Softwood: Pine Species											
lumber	30700845	Lumber Kiln: Direct-fired: Softwood: Non-Pine Species											
lumber	30700846	Lumber Kiln: Direct-fired: Hardwood											
MDF	30700909	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Blowline Blend: Non-Urea Formaldehyde Resin:											
MDF	30700910	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Blowline Blend: Non-Urea Formaldehyde Resin:											
MDF	30700911	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Blowline Blend: Non-Urea Formaldehyde Resin: Mixed											
MDF	30700912	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Blowline Blend: Urea Formaldehyde Resin:											

PCWP	SCC	SCC Level Four	Ethyl benzene	Hydroquinone	MDI	MIBK	Methylene chloride	n-Hexane	Styrene	Toluene	Xylenes	Cresols	Metals emission factors from Table 3 applied (lb/MMBtu)
MDF	30700913	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Blowline Blend: Urea Formaldehyde Resin:											
MDF	30700914	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Blowline Blend: Urea Formaldehyde Resin:											
MDF	30700915	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Non-Blowline Blend:											Yes
MDF	30700916	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Non-Blowline Blend:											Yes
MDF	30700917	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Non-Blowline Blend: Mixed											Yes
MDF	30700918	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Non-Urea Formaldehyde Resin:											Yes
MDF	30700919	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Non-Urea Formaldehyde Resin:											Yes
MDF	30700920	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Non-Urea Formaldehyde Resin:											Yes
MDF	30700923	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Urea Formaldehyde Resin:											Yes
MDF	30700924	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Urea Formaldehyde Resin:											Yes
MDF	30700925	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Urea Formaldehyde Resin:											Yes

PCWP	SCC	SCC Level Four	Ethyl benzene	Hydroquinone	MDI	MIBK	Methylene chloride	n-Hexane	Styrene	Toluene	Xylenes	Cresols	Metals emission factors from Table 3 applied (lb/MMBtu)
MDF	30700926	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Non-Blowline Blend:											
MDF	30700927	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Non-Blowline Blend:											
MDF	30700928	Pressurized Refiner/Primary Tube Dryer: Direct Natural Gas-fired: Non-Blowline Blend: Mixed											
MDF	30700929	Pressurized Refiner/Primary Tube Dryer: Indirect-heated: Blowline Blend: Non-Urea Formaldehyde Resin:				0.0049							
MDF	30700930	Pressurized Refiner/Primary Tube Dryer: Indirect-heated: Blowline Blend: Non-Urea Formaldehyde Resin:											
MDF	30700932	Pressurized Refiner/Primary Tube Dryer: Indirect-heated: Blowline Blend: Urea Formaldehyde Resin:				0.0049							
MDF	30700934	Pressurized Refiner/Primary Tube Dryer: Indirect-heated: Blowline Blend: Non-Urea Formaldehyde Resin:				0.0049							
MDF	30700936	Pressurized Refiner/Primary Tube Dryer: Indirect-heated: Blowline Blend: Urea Formaldehyde Resin:											
MDF	30700939	Pressurized Refiner/Primary Tube Dryer: Indirect-heated: Blowline Blend: Urea Formaldehyde Resin:				0.0049							
MDF	30700942	Secondary Tube Dryer: All Indirect-fired Units								0.00083			
MDF	30700943	Secondary Tube Dryer: All Direct-fired Units											
MDF	30700946	Fiber Dryers: Other											
MDF	30700947	Agriculture Fiber Rotary Dryer											
MDF	30700950	Reconstituted Wood Products Press: Continuous: Urea				0.016							

PCWP	SCC	SCC Level Four	Ethyl benzene	Hydroquinone	MDI	MIBK	Methylene chloride	n-Hexane	Styrene	Toluene	Xylenes	Cresols	Metals emission factors from Table 3 applied (lb/MMBtu)
MDF	30700951	Reconstituted Wood Products Press: Continuous: Non-Urea Formaldehyde Resin				0.016							
MDF	30700960	Reconstituted Wood Products Press: Batch: Urea Formaldehyde Resin				0.016							
MDF	30700961	Reconstituted Wood Products Press: Batch: Non-Urea Formaldehyde Resin				0.016							
MDF	30700962	Agriculture Fiber Board Press											
MDF	30700971	Board Cooler: Urea Formaldehyde Resin											
MDF	30700972	Board Cooler: Non-Urea Formaldehyde Resin											
MDF	30700977	Former Without Blowline Blend: Non-Urea Formaldehyde Resin											
MDF	30700978	Former With Blowline Blend: Non-Urea Formaldehyde Resin											
MDF	30700979	Blender: Non-Urea Formaldehyde Resin											
MDF	30700980	Blender: Urea Formaldehyde Resin											
MDF	30700981	Former Without Blowline Blend: Urea Formaldehyde Resin											
MDF	30700982	Former With Blowline Blend: Urea Formaldehyde Resin											
MDF	30700983	Sanding Operations: Urea Formaldehyde Resin							0.0014				
MDF	30700984	Sawing Operations: Pre-Press: Urea Formaldehyde Resin											
MDF	30700985	Sanding Operations: Non-Urea Formaldehyde Resin							0.0014				
MDF	30700986	Sawing Operations: Pre-Press: Non-Urea Formaldehyde Resin											
MDF	30700987	Sawing Operations: Post-Board Cooler: Urea Formaldehyde Resin											
MDF	30700988	Sawing Operations: Post-Board Cooler: Non-Urea Formaldehyde Resin											
MDF	30700989	Sawing Operations: Post-Press: Pre-Board Cooler: Urea Formaldehyde Resin											
MDF	30700990	Sawing Operations: Post-Press: Pre-Board Cooler: Non-Urea Formaldehyde Resin											



PCWP	SCC	SCC Level Four	Ethyl benzene	Hydroquinone	MDI	MIBK	Methylene chloride	n-Hexane	Styrene	Toluene	Xylenes	Cresols	Metals emission factors from Table 3 applied (lb/MMBtu)
MDF	30700991	Panel Trim Hammermill/Chipper											
MDF	30700994	Combined Process Unit Type Dust Collection: Dry Wood Material											
MDF	30700995	Combined Process Unit Type Dust Collection: Mixed Dry and Green											
MDF	30700996	Resin Storage Tanks											
MDF	30700997	Miscellaneous Coating Operations											
MDF	30700999	Other Not Classified											
OSB	30701009	Rotary Strand Dryer: Direct Wood-fired: Softwood				0.0078				0.015	0.01		Yes
OSB	30701010	Rotary Strand Dryer: Direct Wood-fired: Hardwood							0.0034	0.013			Yes
OSB	30701015	Rotary Strand Dryer: Direct Wood-fired: Mixed Softwood/Hardwood											Yes
OSB	30701020	Rotary Strand Dryer: Direct Natural Gas-fired: Hardwood											
OSB	30701021	Rotary Strand Dryer: Direct Natural Gas-fired:				0.0078				0.015	0.01		
OSB	30701022	Rotary Strand Dryer: Direct Natural Gas-fired: Mixed Softwood/Hardwood											
OSB	30701030	Rotary Strand Dryer: Indirect-heated: Hardwood											
OSB	30701031	Rotary Strand Dryer: Indirect-heated: Softwood				0.0078				0.015	0.01		
OSB	30701032	Rotary Strand Dryer: Indirect-heated: Mixed Softwood/Hardwood											
OSB	30701039	Indirect-heated Conveyor Dryer, Softwood											
OSB	30701040	Conveyor Dryer: Heated Zones: Hardwood											
OSB	30701041	Conveyor Dryer: Heated Zones: Softwood											
OSB	30701042	Conveyor Dryer: Heated Zones: Mixed Hardwood/Softwood											
OSB	30701043	Conveyor Dryer: Unheated Zones: All Species											
OSB	30701053	Reconstituted Wood Products Press: Phenol Formaldehyde Resin											

PCWP	SCC	SCC Level Four	Ethyl benzene	Hydroquinone	MDI	MIBK	Methylene chloride	n-Hexane	Styrene	Toluene	Xylenes	Cresols	Metals emission factors from Table 3 applied (lb/MMBtu)
OSB	30701055	Reconstituted Wood Products Press: Methylene Diphenyl Diisocyanate (MDI) Resin			0.0021								
OSB	30701057	Reconstituted Wood Products Press: Phenol Formaldehyde Resin (surface layers)/ Methylene Diphenyl Diisocyanate (MDI) Resin			0.0011								
OSB	30701058	Reconstituted Wood Products Press											
OSB	30701062	Sanding Operations											
OSB	30701064	Storage Bins: Trimming and Dryer Exhaust Cyclone Dust											
OSB	30701067	Combined Process Unit Type Dust Collection: Dry Wood Material											
OSB	30701068	Combined Process Unit Type Dust Collection: Mixed Dry and Green Wood Material											
OSB	30701070	Blender: Phenol Formaldehyde Resin											
OSB	30701071	Blender: Methylene Diphenyl Diisocyanate (MDI) Resin											
OSB	30701072	Former: Phenol Formaldehyde Resin											
OSB	30701073	Former Operations: Methylene Diphenyl Diisocyanate (MDI) Resin											
OSB	30701074	Former Operations: Phenol Formaldehyde Resin/Methylene Diphenyl Diisocyanate (MDI) Resin											
OSB	30701084	Hammermill/Chipper: Dry Wood Material											
OSB	30701085	Hammermill/Chipper: Mixed Green and Dry Wood Material											
OSB	30701086	Miscellaneous Coating Operations											
OSB	30701087	Resin Storage Tanks											

PCWP	SCC	SCC Level Four	Ethyl benzene	Hydroquinone	MDI	MIBK	Methylene chloride	n-Hexane	Styrene	Toluene	Xylenes	Cresols	Metals emission factors from Table 3 applied (lb/MMBtu)
OSB	30701090	Sawing Operations: Pre-Press Mat Trimming: Phenol Formaldehyde											
OSB	30701091	Sawing Operations: Pre-Press Mat Trimming: Methylene Diphenyl Diisocyanate (MDI) Resin											
OSB	30701092	Sawing Operations: Pre-Press Mat Trimming: Phenol Formaldehyde Resin/Methylene Diphenyl Diisocyanate (MDI) Resin											
OSB	30701093	Sawing Operations: Post-Press Panel Trimming: Phenol Formaldehyde											
OSB	30701094	Sawing Operations: Post-Press Panel Trimming: Methylene Diphenyl Diisocyanate (MDI) Resin											
OSB	30701095	Sawing Operations: Post-Press Panel Trimming: Phenol Formaldehyde Resin/Methylene Diphenyl Diisocyanate (MDI) Resin											
OSB	30701099	Other Not Classified											
HB	30701401	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Non-Phenol Formaldehyde											Yes
HB	30701402	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Non-Phenol Formaldehyde											Yes
HB	30701403	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Non-Phenol Formaldehyde											Yes
HB	30701404	Pressurized Refiner/Primary Tube Dryer: Natural Gas-fired: Blowline Blend: Non-Phenol Formaldehyde	0.00013						0.0027	0.00023	0.000056		
HB	30701405	Pressurized Refiner/Primary Tube Dryer: Natural Gas-fired: Blowline Blend: Non-Phenol Formaldehyde	0.00013						0.0027	0.00023	0.000056		

PCWP	SCC	SCC Level Four	Ethyl benzene	Hydroquinone	MDI	MIBK	Methylene chloride	n-Hexane	Styrene	Toluene	Xylenes	Cresols	Metals emission factors from Table 3 applied (lb/MMBtu)
HB	30701406	Pressurized Refiner/Primary Tube Dryer: Natural Gas-fired: Blowline Blend: Non-Phenol Formaldehyde	0.00013						0.0027	0.00023	0.000056		
HB	30701407	Pressurized Refiner/Primary Tube Dryer: Indirect-fired: Blowline Blend: Phenol Formaldehyde Resin:	0.00013						0.0027	0.00023	0.000056		
HB	30701408	Pressurized Refiner/Primary Tube Dryer: Indirect-fired: Blowline Blend: Phenol Formaldehyde Resin:	0.00013						0.0027	0.00023	0.000056		
HB	30701409	Pressurized Refiner/Primary Tube Dryer: Indirect-fired: Blowline Blend: Phenol Formaldehyde Resin:	0.00013						0.0027	0.00023	0.000056		
HB	30701410	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Phenol Formaldehyde Resin:											Yes
HB	30701411	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Phenol Formaldehyde Resin:											Yes
HB	30701412	Pressurized Refiner/Primary Tube Dryer: Direct Wood-fired: Blowline Blend: Phenol Formaldehyde Resin:											Yes
HB	30701413	Pressurized Refiner/Primary Tube Dryer: Natural Gas-fired: Blowline Blend: Phenol Formaldehyde Resin:	0.00013						0.0027	0.00023	0.000056		
HB	30701414	Pressurized Refiner/Primary Tube Dryer: Natural Gas-fired: Blowline Blend: Phenol Formaldehyde Resin:	0.00013						0.0027	0.00023	0.000056		
HB	30701415	Pressurized Refiner/Primary Tube Dryer: Natural Gas-fired: Blowline Blend: Phenol Formaldehyde Resin:	0.00013						0.0027	0.00023	0.000056		

PCWP	SCC	SCC Level Four	Ethyl benzene	Hydroquinone	MDI	MIBK	Methylene chloride	n-Hexane	Styrene	Toluene	Xylenes	Cresols	Metals emission factors from Table 3 applied (lb/MMBtu)
HB	30701417	Pressurized Refiner/Primary Tube Dryer: Indirect-fired: Blowline Blend: Non-Phenol Formaldehyde	0.00013						0.0027	0.00023	0.000056		
HB	30701418	Pressurized Refiner/Primary Tube Dryer: Indirect-fired: Blowline Blend: Non-Phenol Formaldehyde	0.00013						0.0027	0.00023	0.000056		
HB	30701419	Pressurized Refiner/Primary Tube Dryer: Indirect-fired: Blowline Blend: Non-Phenol Formaldehyde	0.00013						0.0027	0.00023	0.000056		
HB	30701421	Hardboard Oven				0.0046							
HB	30701423	Secondary Tube Dryer: All Direct-fired Units											
HB	30701424	Secondary Tube Dryer: All Indirect-fired Units											
HB	30701426	Fiber Dryers: Other											
HB	30701427	Press Pre-Dryer: Phenol Formaldehyde Resin											
HB	30701428	Press Pre-Dryer: Non-Phenol Formaldehyde Resin				0.0034			0.00016	0.001			
HB	30701431	Humidifier	0.000032							0.000034	0.000042	0.00054	
HB	30701441	Dry Hardboard Press: Phenol Formaldehyde								0.0011	0.0089		
HB	30701443	Dry Hardboard Press: Non-Phenol Formaldehyde											
HB	30701444	Wet Hardboard Press: Phenol Formaldehyde								0.0011	0.0089		
HB	30701445	Wet Hardboard Press: Non-Phenol Formaldehyde								0.0011	0.0089		
HB	30701450	Blender: Phenol Formaldehyde Resin											
HB	30701451	Blender: Non-Phenol Formaldehyde Resin											
HB	30701452	Fiber Washer											
HB	30701455	Digester: Softwood				0.00024			0.00016				
HB	30701456	Digester: Hardwood				0.00024			0.00016				
HB	30701457	Digester: Mixed Softwood/Hardwood				0.00024			0.00016				
HB	30701460	Atmospheric Refiner: Softwood								0.00029			

PCWP	SCC	SCC Level Four	Ethyl benzene	Hydroquinone	MDI	MIBK	Methylene chloride	n-Hexane	Styrene	Toluene	Xylenes	Cresols	Metals emission factors from Table 3 applied (lb/MMBtu)
HB	30701461	Atmospheric Refiner: Hardwood								0.00029			
HB	30701462	Atmospheric Refiner: Mixed								0.00029			
HB	30701463	Pressurized Refiner: Softwood				0.00024			0.00016				
HB	30701464	Pressurized Refiner: Hardwood				0.00024			0.00016				
HB	30701465	Pressurized Refiner: Mixed Softwood/Hardwood				0.00024			0.00016				
HB	30701466	Pressurized Digester/Refiner: Softwood				0.00024			0.00016				
HB	30701467	Pressurized Digester/Refiner:				0.00024			0.00016				
HB	30701468	Pressurized Digester/Refiner: Mixed Softwood/Hardwood				0.00024			0.00016				
HB	30701480	Sanding Operations											
HB	30701481	Sawing Operations											
HB	30701485	Wet Hardboard Former: Vacuum System: Non-Phenol Formaldehyde				0.00023							
HB	30701486	Wet Hardboard Former: Vacuum System: Phenol Formaldehyde Resin				0.00023							
HB	30701487	Dry Process Former Operations: Dust Collection: Phenol											
HB	30701488	Dry Process Former Operations: Dust Collection: Non-Phenol Formaldehyde Resin											
HB	30701489	Wet Process Former Operations: Dust (Fiber) Collection: Phenol Formaldehyde Resin											
HB	30701490	Wet Process Former Operations: Dust (Fiber) Collection: Non-Phenol Formaldehyde Resin											
HB	30701493	Combined Process Unit Type Dust Collection: Dry Wood Material											
HB	30701494	Combined Process Unit Type Dust Collection: Mixed Dry and Green											
HB	30701495	Panel Trim Chipper											
HB	30701496	Miscellaneous Coating Operations											

PCWP	SCC	SCC Level Four	Ethyl benzene	Hydroquinone	MDI	MIBK	Methylene chloride	n-Hexane	Styrene	Toluene	Xylenes	Cresols	Metals emission factors from Table 3 applied (lb/MMBtu)
HB	30701497	Resin Storage Tanks											
HB	30701499	Other Not Classified											
FB	30701513	Mat Dryer: Indirect-heated: Starch binder: Softwood											
FB	30701514	Mat Dryer: Indirect-heated: Starch binder: Hardwood											
FB	30701515	Mat Dryer: Indirect-heated: Starch binder: Mixed											
FB	30701516	Mat Dryer: Indirect-heated: Asphalt binder: Softwood											
FB	30701517	Mat Dryer: Indirect-heated: Asphalt binder: Hardwood											
FB	30701518	Mat Dryer: Indirect-heated: Asphalt binder: Mixed											
FB	30701519	Mat Dryer: Direct-heated: Starch binder: Softwood											
FB	30701520	Mat Dryer: Direct-heated: Starch binder: Hardwood											
FB	30701521	Mat Dryer: Direct-heated: Starch binder: Mixed Softwood/Hardwood											
FB	30701522	Mat Dryer: Direct-heated: Asphalt binder: Softwood											
FB	30701523	Mat Dryer: Direct-heated: Asphalt binder: Hardwood											
FB	30701524	Mat Dryer: Direct-heated: Asphalt binder: Mixed Softwood/Hardwood											
FB	30701528	Atmospheric Refiner: Hardwood								0.00029			
FB	30701529	Atmospheric Refiner: Mixed								0.00029			
FB	30701530	Atmospheric Refiner: Softwood								0.00029			
FB	30701531	Pressurized Refiner: Softwood				0.00024			0.00016				
FB	30701532	Pressurized Refiner: Hardwood				0.00024			0.00016				
FB	30701533	Pressurized Refiner: Mixed Softwood/Hardwood				0.00024			0.00016				
FB	30701534	Digester: Softwood											

PCWP	SCC	SCC Level Four	Ethyl benzene	Hydroquinone	MDI	MIBK	Methylene chloride	n-Hexane	Styrene	Toluene	Xylenes	Cresols	Metals emission factors from Table 3 applied (lb/MMBtu)
FB	30701535	Digester: Hardwood				0.00024			0.00016				
FB	30701536	Digester: Mixed Softwood/Hardwood				0.00024			0.00016				
FB	30701537	Pressurized Digester/Refiner: Softwood				0.00024			0.00016				
FB	30701538	Pressurized Digester/Refiner:				0.00024			0.00016				
FB	30701539	Pressurized Digester/Refiner: Mixed Softwood/Hardwood				0.00024			0.00016				
FB	30701540	Fiber Washer: Softwood											
FB	30701541	Fiber Washer: Hardwood											
FB	30701542	Fiber Washer: Mixed Softwood/Hardwood											
FB	30701551	Wet Fiberboard Former: Vacuum: All Binder								0.0023			
FB	30701561	Panel Trim Chipper											
FB	30701562	Sawing Operations											
FB	30701567	Combined Process Unit Type Dust Collection: Dry Wood Material											
FB	30701568	Combined Process Unit Type Dust Collection: Mixed Dry and Green											
FB	30701591	Miscellaneous Coating Operations											
FB	30701592	Resin Storage Tanks											
FB	30701599	Other Not Classified											
LVL	30701601	Hardwood Veneer Dryer: Indirect-heated: Heated Zones				0.0022							
LVL	30701602	Hardwood Veneer Dryer: Indirect-heated: Cooling Section				0.029							
LVL	30701603	Softwood Veneer Dryer: Indirect-heated: Heated Zones				0.0015				0.0011	0.00075		
LVL	30701604	Softwood Veneer Dryer: Indirect-heated: Cooling Section				0.0054					0.0033		
LVL	30701605	Hardwood Veneer Dryer: Direct Wood-fired: Heated Zones											Yes
LVL	30701606	Hardwood Veneer Dryer: Direct Wood-fired: Cooling Section											



PCWP	SCC	SCC Level Four	Ethyl benzene	Hydroquinone	MDI	MIBK	Methylene chloride	n-Hexane	Styrene	Toluene	Xylenes	Cresols	Metals emission factors from Table 3 applied (lb/MMBtu)
LVL	30701607	Softwood Veneer Dryer: Direct Wood-fired: Heated Zones											Yes
LVL	30701608	Softwood Veneer Dryer: Direct Wood-fired: Cooling Section											
LVL	30701609	Hardwood Veneer Dryer: Direct Natural Gas-fired: Heated Zones											
LVL	30701610	Hardwood Veneer Dryer: Direct Natural Gas-fired: Cooling Section											
LVL	30701611	Softwood Veneer Dryer: Direct Natural Gas-fired: Heated Zones					0.0026		0.0015	0.0074	0.0039		
LVL	30701612	Press: Phenol Formaldehyde Resin											
LVL	30701613	Softwood Veneer Dryer: Direct Natural Gas-fired: Cooling Section											
LVL	30701614	Press: Non-Phenol Formaldehyde Resin			0.09								
LVL	30701615	Veneer Redryer: Radio Frequency-heated: Softwood											
LVL	30701616	Veneer Redryer: Radio Frequency-heated: Hardwood											
LVL	30701617	Veneer Redryer: Non-RF Heat: Softwood											
LVL	30701618	Veneer Redryer: Non-RF Heat: Hardwood											
LVL	30701619	Sanding Operations											
LVL	30701623	Hammermill/Chipper: Dry Wood Material											
LVL	30701624	Hammermill/Chipper: Mixed Green and Dry Wood Material											
LVL	30701627	Sawing Operations: Dry Veneer and Laminated Veneer Lumber (LVL) Trimming											
LVL	30701628	Log Steaming Vat											
LVL	30701629	Resin Storage Tanks											
LVL	30701633	Combined Process Unit Type Dust Collection: Dry Wood Material											

PCWP	SCC	SCC Level Four	Ethyl benzene	Hydroquinone	MDI	MIBK	Methylene chloride	n-Hexane	Styrene	Toluene	Xylenes	Cresols	Metals emission factors from Table 3 applied (lb/MMBtu)
LVL	30701634	Combined Process Unit Type Dust Collection: Mixed Dry and Green											
LVL	30701635	Miscellaneous Coating Operations											
LVL	30701639	Other Not Classified											
Ijoist	30701670	Curing Chamber											
Ijoist	30701671	Resin Storage Tanks											
Ijoist	30701672	Sawing Operations											
Ijoist	30701679	Other Not Classified											
GLULAM	30701680	Press/Curing Chamber: Phenol-Resorcinol-Formaldehyde (PRF) resin											
GLULAM	30701681	Press/Curing Chamber: Non-Phenol-Resorcinol-Formaldehyde (PRF) Resin											
GLULAM	30701682	Resin Storage Tanks											
GLULAM	30701683	Chippers											
GLULAM	30701684	Sanding Operations											
GLULAM	30701685	Sawing Operations											
GLULAM	30701689	Other Not Classified											
LSL	30701701	Rotary Strand Dryer: Direct Wood-fired: Hardwood											Yes
LSL	30701702	Rotary Strand Dryer: Direct Wood-fired: Softwood											Yes
LSL	30701703	Rotary Strand Dryer: Direct Wood-fired: Mixed Softwood/Hardwood											Yes
LSL	30701704	Rotary Strand Dryer: Direct Natural Gas-fired:											
LSL	30701705	Rotary Strand Dryer: Direct Natural Gas-fired: Hardwood											
LSL	30701706	Rotary Strand Dryer: Direct Natural Gas-fired: Mixed Softwood/Hardwood											
LSL	30701707	Rotary Strand Dryer: Indirect-heated: Softwood											
LSL	30701708	Rotary Strand Dryer: Indirect-heated: Hardwood											
LSL	30701709	Rotary Strand Dryer: Indirect-heated: Mixed Softwood/Hardwood											

PCWP	SCC	SCC Level Four	Ethyl benzene	Hydroquinone	MDI	MIBK	Methylene chloride	n-Hexane	Styrene	Toluene	Xylenes	Cresols	Metals emission factors from Table 3 applied (lb/MMBtu)
LSL	30701710	Conveyor Dryer: Heated Zones: Hardwood											
LSL	30701711	Conveyor Dryer: Heated Zones: Softwood											
LSL	30701712	Conveyor Dryer: Heated Zones: Mixed Hardwood/Softwood											
LSL	30701713	Conveyor Dryer: Unheated Zones: All Species											
LSL	30701720	Press: Methylene Diphenyl Diisocyanate (MDI) Adhesive			0.09								
LSL	30701721	Press: Non-Methylene Diphenyl Diisocyanate (MDI) Adhesive											
LSL	30701722	Blender: Methylene Diphenyl Diisocyanate (MDI) Adhesive											
LSL	30701723	Blender: Non-Methylene Diphenyl Diisocyanate (MDI) Adhesive											
LSL	30701724	Former Operations: Methylene Diphenyl Diisocyanate (MDI) Adhesive											
LSL	30701725	Former Operations: Non- Methylene Diphenyl Diisocyanate (MDI) Adhesive											
LSL	30701730	Sanding Operations											
LSL	30701731	Sawing Operations											
LSL	30701735	Hammermill/Chipper: Dry Wood Material											
LSL	30701736	Hammermill/Chipper: Mixed Green and Dry Wood Material											
LSL	30701737	Resin Storage Tanks											
LSL	30701739	Other Not Classified											
PSL	30701740	Hardwood Veneer Dryer: Indirect-heated: Heated Zones				0.0022							
PSL	30701741	Hardwood Veneer Dryer: Indirect-heated: Cooling Section				0.029							

PCWP	SCC	SCC Level Four	Ethyl benzene	Hydroquinone	MDI	MIBK	Methylene chloride	n-Hexane	Styrene	Toluene	Xylenes	Cresols	Metals emission factors from Table 3 applied (lb/MMBtu)
PSL	30701742	Softwood Veneer Dryer: Indirect-heated: Heated Zones				0.0015				0.0011	0.00075		
PSL	30701743	Softwood Veneer Dryer: Indirect-heated: Cooling Section				0.0054					0.0033		
PSL	30701744	Hardwood Veneer Dryer: Direct Wood-fired: Heated Zones											Yes
PSL	30701745	Hardwood Veneer Dryer: Direct Wood-fired: Cooling Section											
PSL	30701746	Softwood Veneer Dryer: Direct Wood-fired: Heated Zones											Yes
PSL	30701747	Softwood Veneer Dryer: Direct Wood-fired: Cooling Section											
PSL	30701748	Hardwood Veneer Dryer: Direct Natural Gas-fired: Heated Zones											
PSL	30701749	Hardwood Veneer Dryer: Direct Natural Gas-fired: Cooling Section											
PSL	30701750	Softwood Veneer Dryer: Direct Natural Gas-fired: Heated Zones				0.0026			0.0015	0.0074	0.0039		
PSL	30701751	Softwood Veneer Dryer: Direct Natural Gas-fired: Cooling Section											
PSL	30701752	Veneer Redryer: Radio Frequency-heated: Hardwood											
PSL	30701753	Veneer Redryer: Radio Frequency-heated: Softwood											
PSL	30701754	Veneer Redryer: Other: Hardwood											
PSL	30701755	Veneer Redryer: Other: Softwood											
PSL	30701760	Press: Phenol Formaldehyde Resin											
PSL	30701761	Press: Non-Phenol Formaldehyde Resin				0.09							
PSL	30701765	Hammermill/Chipper: Dry Wood Material											
PSL	30701766	Hammermill/Chipper: Mixed Green and Dry Wood Material											

PCWP	SCC	SCC Level Four	Ethyl benzene	Hydroquinone	MDI	MIBK	Methylene chloride	n-Hexane	Styrene	Toluene	Xylenes	Cresols	Metals emission factors from Table 3 applied (lb/MMBtu)
PSL	30701767	Sanding Operations											
PSL	30701769	Sawing Operations: Dry Veneer and Parallel Strand Lumber (PSL) Trimming											
PSL	30701772	Combined Process Unit Type Dust Collection: Dry Wood Material											
PSL	30701773	Combined Process Unit Type Dust Collection: Mixed Dry and Green											
PSL	30701774	Log Steaming Vat											
PSL	30701776	Resin Storage Tanks											
PSL	30701777	Miscellaneous Coating Operations											
PSL	30701779	Other Not Classified											