

Category		Title
NFR:	2.D.3	Wood processing
SNAP:	040620	Wood processing
ISIC:	20	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
Version	Guidebook 2009	

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1 Overview

The present chapter presents a simple emission estimation method (Tier 1 only) for wood processing. This source category is only important for particulate emissions. Previous versions of the Guidebook did not contain a chapter on wood processing. The emissions from this source category however are assumed to be small, i.e. less than 1 % of the national emissions for particulates.

2 Description of sources

2.1 Process description

The present chapter addresses emissions of dust from the processing of wood. This includes the manufacture of plywood, reconstituted wood products and engineered wood products. Figure 2.1 shows a simplified process scheme for wood processing.

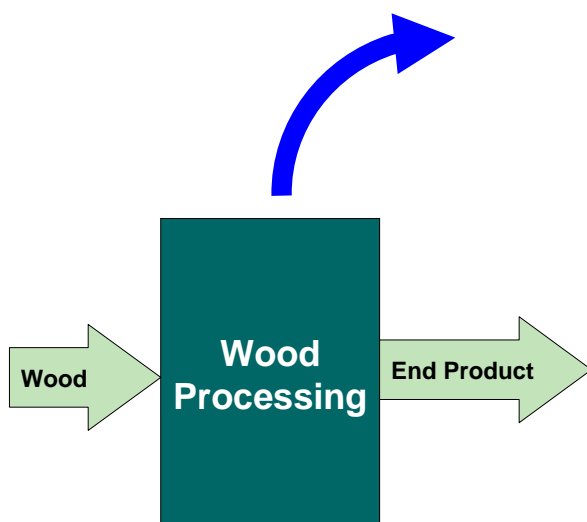


Figure 2.1 Simplified process scheme for source category 2.D.3 Wood Processing

2.2 Techniques

No separate techniques/technologies have been identified.

2.3 Emissions and controls

Wood processing leads to emissions of particulate matter.

3 Methods

3.1 Choice of method

Since only a Tier 1 default approach for this source category is presented, the present sub-section includes neither information on choice of method or a decision tree.

3.2 Tier 1 default approach

The present sub-section provides default emission factors for this source category. Since it is only a minor source of emissions and not a key category, only Tier 1 default emission factors are provided.

3.2.1 Algorithm

The Tier 1 approach uses the general equation:

$$E_{\text{pollutant}} = AR_{\text{production}} \times EF_{\text{pollutant}} \quad (1)$$

The Tier 1 emission factors assume an averaged or typical technology and abatement implementation in the country and integrate all sub-processes.

3.2.2 Default emission factors

A default emission factor for total suspended particulate (TSP) emissions from wood processing is provided in Table 3.1. This emission factor has been extracted from EPA (1995). Data for PM10 and PM2.5 are not available.

Table 3.1 Tier 1 emission factors for source category 2.D.3 Wood processing

Tier 1 default emission factors					
	Code	Name			
NFR Source Category	2.D.3	Wood processing			
Fuel	NA				
Not applicable	Pb, Cd, Hg, Cr, Ni, Se, Zn, Aldrin, Chlordane, Chlordecone, Dieldrin, Endrin, Heptachlor, Heptabromo-biphenyl, Mirex, Toxaphene, HCH, DDT, PCB, PCDD/F, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene, Total 4 PAHs, HCB, PCP, SCCP				
Not estimated	NOx, CO, NMVOC, SOx, NH3, PM10, PM2.5, As, Cu				
Pollutant	Value	Unit	95% confidence interval		Reference
			Lower	Upper	
TSP	1	kg/Mg wood product	0.1	10	US EPA (1995)

3.2.3 Activity data

The relevant activity statistic is the mass of wood products processed.

3.3 Tier 2 technology-specific approach

Not available for this source.

3.4 Tier 3 emission modelling and use of facility data

Not available for this source.

4 Data quality

No specific issues are reported for this source category.

5 References

EPA, 1995. *Compilation of Air Pollutant Emission Factors (AP-42) CD-ROM*. United States Environmental Protection Agency.

6 Point of enquiry

Enquiries concerning this chapter should be directed to the relevant leader(s) of the Task Force on Emission Inventories and Projection's expert panel on combustion and industry. Please refer to the TFEIP website (www.tfeip-secretariat.org) for the contact details of the current expert panel leaders.