



United States Environmental Protection Agency
Pressed Wood Manufacturing Industry Survey:
Hardboard and Structural Composite Manufacturers
Questionnaire

Survey ID: _____

Please return the completed response no later than **Weekday, Month Day, Year.**

Completing the survey is voluntary, but it is important that you respond. EPA needs information from all companies (including those making products with low formaldehyde emissions) to determine whether further action is needed, and to understand the impact of potential actions on manufacturers. Your participation will help EPA understand your company and the industry as a whole.

The information collected by EPA may be disclosed to contractors of the Agency. This access will only occur to enable perform required tasks for the Agency. These contractors, including staff, will comply with Agency procedures for confidential information collected in connection with TSCA. By returning the survey to EPA, I consent to this disclosure to contractors.

The public reporting and recordkeeping burden for this collection of information is estimated to average 14 hours per response. Send comments on the Agency's use of this information, the accuracy of the provided burden estimates, and any methods for minimizing respondent burden, including through the use of alternative collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the questionnaire to this address.

An Agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

I. General Manufacturer Identification Information

Please verify that the information that we have for your company is accurate. Please **correct any complete any missing information** on the lines following Questions 1 through 8 below. Please appropriate staff at your company as necessary to obtain the correct information.

Check red box if response is confidential business information (CBI)

1. The name of your company:

2. The name of your plant:

3. The address of your plant (mailing address and physical address, if different):

Physical

Address Line 1: _____

Address Line 2: _____

City: _____

State:

ZIP

Mailing

Address Line 1: _____

Address Line 2: _____

City: _____

State:

ZIP

4. The name and address of the ultimate parent company that owns this plant:

Parent Company: _____

Address Line 1: _____

Address Line 2: _____

City: _____

State:

ZIP

5. Your company's website address:

6. Your contact information:

Name: _____

Title: _____

Telephone: _____

E-mail: _____

Check red box if response is confidential business information (CBI)

7. Size of ultimate parent company:

- a. The approximate number of employees (worldwide) of the ultimate parent company that owns the
- Number: less than 50
 50-99
 100-249
 250-499
 500-999
 1,000-1,499
 1,500 or more
- b. The approximate 2009 gross revenue (worldwide) of the ultimate parent company that owns the
- Gross Revenue (\$): less than \$1 million
 \$1-\$49 million
 \$50-\$99 million
 \$100-\$499 million
 \$500 million or more

8. Size of this plant:

- a. The approximate total number of employees (full time and part time) in total at this plant:
- Number: less than 25
 25-49
 50-99
 100-149
 150-249
 250-499
 500 or more
- b. The approximate 2009 gross revenue of this plant:
- Gross Revenue (\$): less than \$1 million
 \$1-\$49 million
 \$50-\$99 million
 \$100-\$499 million
 \$500 million or more

II. Primary Pressed Wood Products Manufactured

9. Primary pressed wood products manufactured and production volume.

* Check red box if response is confidential business information (CBI)

	Pressed Wood Category	Check if produced at your plant.	In the 5-year period from 2005 through 2009, what was the average annual total production? (please specify basis).	Provide your plant's rated maximum capacity.	To your knowledge, are any of your products used in non-structural applications?
CBI*	(Column 1)	(Column 2)	(Column 3)	(Column 4)	(Column 5)
	<i>Example: Hardboard</i>	<input checked="" type="checkbox"/>	<i>Avg. annual production: 1 million sq. ft</i> <i>basis 1/8"</i>	<i>Max capacity: 5 million sq. ft</i> <i>basis 1/8"</i>	Yes
<input type="checkbox"/>	a. Glulam	<input type="checkbox"/>	Avg. annual production: _____ basis: _____	Max capacity: _____ basis: _____	
<input type="checkbox"/>	b. Hardboard	<input type="checkbox"/>	Avg. annual production: _____ basis: _____	Max capacity: _____ basis: _____	
<input type="checkbox"/>	c. I-Joists	<input type="checkbox"/>	Avg. annual production: _____ basis: _____	Max capacity: _____ basis: _____	
<input type="checkbox"/>	d. Oriented Strandboard (OSB)	<input type="checkbox"/>	Avg. annual production: _____ basis: _____	Max capacity: _____ basis: _____	
<input type="checkbox"/>	e. Softwood Plywood	<input type="checkbox"/>	Avg. annual production: _____ basis: _____	Max capacity: _____ basis: _____	
<input type="checkbox"/>	f. Structural Composite Lumber (SCL)*	<input type="checkbox"/>	Avg. annual production: _____ basis: _____	Max capacity: _____ basis: _____	
<input type="checkbox"/>	g. Other Structural Composite. Please specify:	<input type="checkbox"/>	Avg. annual production: _____ basis: _____	Max capacity: _____ basis: _____	

* Includes laminated veneer lumber (LVL), laminated strand lumber (LSL), parallel strand lumber (PSL), and oriented strand lumber (OSL).

Copy #1 of Question 10

10. Resin Types and Certification Standards. Please complete the following table for each pressed wood category produced at your plant. This survey, adhesive/emissions class means a class of pressed wood product that differs from others based on binder/resin technology, formaldehyde certification standard category, and/or formaldehyde emission profile. If you produce products in more than one adhesive/emissions class, please list each class in a separate row. For average and maximum emissions, calculate the average and maximum emissions over one year. Average and maximum emissions cannot be calculated over one year, report the average and maximum emissions based on available data.

Click the button below to have the electronic version of this form automatically generate an additional copy of Question 10. If you are using this form, please use the extra copies provided and make additional copies as necessary.

Add Copy

* Check red box if response is confidential business information (CBI)

CBI	Pressed Wood Category (select from list below)	Adhesive Emissions Class (Col 1)	Binder/Resin Category (Select from list below)	Emission Standard Certification (select from list below)	Indicate when Products in each Adhesive/ Emissions Class were produced and/or whether it will be produced in the future			Formaldehyde emission levels from finished boards			Share of Production Volume	
					Last 5 years?	This Year?	3 years from now?	Average (specify units)	Max (specify units)	Measurement method		This Year (%)
*	(Col 1)	(Col 2)	(Col 3)	(Col 4)	(Col 5)	(Col 6)	(Col 7)	(Col 8)	(Col 9)	(Col 10)	(Col 11)	(Col 12)
	Example: OSB	1	PF	E1	Yes	Yes	Yes	0.5 mg/100g	0.7 mg/100g	EN120 Perforator Test	0%	20%
	Example: OSB	2	pMDI	F****	No	No	Yes	0.2 mg/L	0.3mg/L	JISA1901 Japanese Small Chamber Test	100%	80%
<input type="checkbox"/>												
<input type="checkbox"/>												
<input type="checkbox"/>												

1. Pressed Wood Category Abbreviations/Binder/Resin Categories:

GL	Glulam	CNSL	Cashew Nut Shell Liquid	PUFT	Phenol-urea-formaldehyde	Tannin	Tannin	E1/E2	European Standard (specify level in table above)
HB	Hardboard	MF	Melamine-formaldehyde	PVA	Polyvinyl Acetate	HUD	HUD	F	Japanese Standard (specify "*" level in table above)
IJ	I-Joist	MUF	Melamine-urea-formaldehyde	SBR	Soy-based resins	O	Other - please specify	HUD	HUD Standard
OSB	Oriented strandboard	pMDI	Polymeric Diphenylmethane Diisocyanate	TBR	Tannin-based resins	None	No certification standard category was met/will be met	None	Other - please specify
SWPW	Softwood plywood	PF	Phenol-formaldehyde	UF	Urea-formaldehyde	N/A	Not applicable/not required	N/A	No certification standard category was met/will be met
SCL	Structural composite lumber	PF-MDI	Phenol-formaldehyde-MDI	+s	addition of scavenger to resin (for example, "MF+s")				
OTR	Other structural composites - please specify	PMUF-MDI	Phenol-melamine-urea-formaldehyde-MDI	+c	addition of catalysts to resin				
		PUF-MDI	Phenol-urea-formaldehyde-MDI	+a	addition of other additives to resin				

3. Certification Standard Categories:

E1/E2	European Standard (specify level in table above)
F	Japanese Standard (specify "*" level in table above)
HUD	HUD Standard
O	Other - please specify
None	No certification standard category was met/will be met
N/A	Not applicable/not required

III. Recent or Planned Changes Resulting in Lower Formaldehyde Emissions

Check red box if response is confidential business information (CBI)

11. Have you made any recent changes (since 2005) to production processes or raw materials that have resulted in lower product formaldehyde emissions?

- Yes, for Glulam:
 - The primary purpose for the change was to lower product formaldehyde emissions.
 - The change was made for other reasons.
- Yes, for Hardboard:
 - The primary purpose for the change was to lower product formaldehyde emissions.
 - The change was made for other reasons.
- Yes, for I-Joists:
 - The primary purpose for the change was to lower product formaldehyde emissions.
 - The change was made for other reasons.
- Yes, for Oriented Strandboard:
 - The primary purpose for the change was to lower product formaldehyde emissions.
 - The change was made for other reasons.
- Yes, for Softwood Plywood:
 - The primary purpose for the change was to lower product formaldehyde emissions.
 - The change was made for other reasons.
- Yes, for Structural Composite Lumber:
 - The primary purpose for the change was to lower product formaldehyde emissions.
 - The change was made for other reasons.
- No changes were made since 2005 that resulted in lower product formaldehyde emissions, or product formaldehyde emissions were not measured after changes made since 2005.

12. Do you plan to make any changes in the next three years to production processes or raw materials expected to result in lower product formaldehyde emissions?

- Yes, for Glulam:
 - The primary purpose for the change is to lower product formaldehyde emissions.
 - The change will be made for other reasons.
- Yes, for Hardboard:
 - The primary purpose for the change is to lower product formaldehyde emissions.
 - The change will be made for other reasons.
- Yes, for I-Joists:
 - The primary purpose for the change is to lower product formaldehyde emissions.
 - The change will be made for other reasons.
- Yes, for Oriented Strandboard:
 - The primary purpose for the change is to lower product formaldehyde emissions.
 - The change will be made for other reasons.
- Yes, for Softwood Plywood:
 - The primary purpose for the change is to lower product formaldehyde emissions.
 - The change will be made for other reasons.
- Yes, for Structural Composite Lumber:
 - The primary purpose for the change is to lower product formaldehyde emissions.
 - The change will be made for other reasons.
- No changes are planned in the next three years that are expected to result in lower product formaldehyde emissions.

IV. Issues That May Affect Ability To Reduce Formaldehyde or Switch to a No Added Formaldehyde Production Technology

Check red box if response is confidential business information (CBI)

13. Issues That May Affect Ability To Reduce Formaldehyde Emissions. If you currently use added formaldehyde, please explain the issues you would need to address in order to *reduce formaldehyde emissions* (without eliminating added formaldehyde). Complete Question 13 for a *pressed wood category* manufactured at your plant that has added formaldehyde. If your response would differ for different products within a pressed wood category, then report them separately.

Click the button below to have the electronic version of this form automatically generate an additional copy of Question 13. If you are using the paper version of this form, please use the extra copies provided and make additional copies as necessary.

Add Copy

- a. Please specify the Primary Pressed Wood Category:
 - Glulam
 - Hardboard
 - I-Joists
 - Oriented Strandboard
 - Softwood Plywood
 - Structural Composite Lumber
 - Other Structural Composites. Please specify: _____

- b. Please explain what changes would be necessary to raw materials used and production technology in order to reduce the formaldehyde emissions from your products. If possible, please provide information about the costs that would be associated with these changes.

Expand Answer

Copy #1 of Question 14

Check red box if response is confidential business information (CBI)

14. Issues that May Affect Ability To Switch to NAF Production Technology. If you currently use a production technology with added formaldehyde, please explain the issues you would need to address in order to use a no-added formaldehyde (NAF) resin technology. Complete Question 14 for each *pressed wood category* manufactured at your plant that has added formaldehyde. If your responses would differ for different products within a pressed wood category, then report them separately.

Click the button below to have the electronic version of this form automatically generate an additional copy of Question 14. If you are using the paper version of this form, please use the extra copies provided and make additional copies as necessary.

Add Copy

- a. Please specify the Primary Pressed Wood Category:
 - Glulam
 - Hardboard
 - I-Joists
 - Oriented Strandboard
 - Softwood Plywood
 - Structural Composite Lumber
 - Other Structural Composites. Please specify: _____

- b. Please explain what changes would be necessary to raw materials used and production technology in order to adopt a no-added formaldehyde production technology. If possible, please provide information about the costs that would be associated with these changes.

Expand Answer

THE END

Thank you. Please see the sheet labeled *Instructions for Returning the Completed Questionnaire to EPA* for directions on how to return this questionnaire to EPA.