



Project Summary

Evaluation of Emission Factors for Formaldehyde from Certain Wood Processing Operations

Ted S. White

A search for information on formaldehyde emissions from wood veneer operations was performed to develop emission factors for the industry. Formaldehyde releases of 246 kg (542 lb) were reported under Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) from a large plywood plant in Mississippi. However, existing data found during the study period were insufficient to allow reliable emission factors to be calculated.

This Project Summary was developed by EPA's Air and Energy Engineering Research Laboratory, Research Triangle Park, NC, to announce key findings of the research project that is fully documented in a separate report of the same title (see Project Report ordering information at back).

Supplemental Study

The purpose of this study was to supplement information presented in "Evaluation of Emission Factors for Formaldehyde from Certain Wood Processing Operations," EPA-450/3-87/023 (NTIS PB88-118492), October, 1987, with any additional formaldehyde emission information that became available between October 1987 and May 1989. The focus of this effort was existing data that would allow calculation of emission factors for four unit operations

in wood veneer plants: (1) formulating the urea- and phenol-formaldehyde resin glues, (2) applying the glues, (3) curing, and (4) storing the finished products.

The methodology used for collecting emission data included: (1) telephone surveys of regulatory personnel, industry contacts, and trade organization contacts; (2) a computerized literature search; and (3) a search of data bases containing air toxics emissions data, including The National Air Toxics Information Clearinghouse (NATICH), recent supplements to the Best Available Control Technology/Lowest Achievable Emission Rate (BACT/LAER) Clearinghouse document, and estimates of 1987 releases of formaldehyde from plants provided to EPA under the Superfund Amendments and Reauthorization Act (SARA) of 1986.

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Mandatory submittals of formaldehyde release estimates under SARA Title III and the California Air Toxic Hot Spot Act of 1987 should become available within the next few years. These data could potentially be combined with available

production statistics for the wood veneer industry to compile emissions factors. More reliable data may become available from compliance tests that follow permit decisions in States that regulate formaldehyde emissions from wood veneer plants now and in the future. A comprehensive test program performed in several plants and unit operations would provide the highest quality, most useful data for emission factor development.

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T. Kelly Janes is the EPA Project Officer (see below).
The complete report, entitled "Evaluation of Emission Factors for Formaldehyde from Certain Wood Processing Operations" (Order No. PB 90-254 988 IAS; Cost: \$15.00, subject to change) will be available only from:
National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161
Telephone: 703-487-4650
The EPA Project Officer can be contacted at:
Air and Energy Engineering Research Laboratory
U.S. Environmental Protection Agency
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