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WOOD PRODUCTS IN THE WASTE STREAM--CHARACTERIZATION AND COMBUSTION EMISSIONS

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Wood Products in the Waste Stream - Characterization and Combustion Emissions

Volume 1, Technical Report

Control Technology Center

Sponsored by:

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U.S. Environmental Protection Agency
Research Triangle Park, NC 27711

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U.S. Environmental Protection Agency
Research Triangle Park, NC 27711

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Wood Products in the Waste Stream - Characterization and Combustion Emissions

Volume 1, Technical Report

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ABSTRACT

Waste wood, an alternative to the combustion of fossil fuels, has raised concerns that if it is "contaminated" with paints, resins, preservatives, etc. it may generate unacceptable environmental impacts during combustion. Given the difficulty of separating the waste wood and the possible size of the resource, it is important to identify the problems associated with combustion. This project is designed to:

- Identify the quantity and quality of waste wood;
- Summarize of regulatory issues affecting the processing and combustion of waste wood for energy;
- Characterize waste-wood processing and combustion facilities;
- Characterize representative waste-wood samples; and
- Collect and analyze emission data from operating combustion facilities.

Waste wood is wood separated from the solid-waste stream and processed into a uniform-sized product that is reused for other purposes such as fuel. Specific types of waste wood described include:

- Pallets;
- Construction and demolition waste;
- Wood treated with paints or stains;
- Wood containing glues, binders, or resins;
- Wood containing plastics or vinyl;
- Wood treated with preservatives such as creosote, chloropentaphenol and chromium copper arsenate; and
- Wood treated with pesticides or fungicides.

This study, completed in mid-1992, describes research about technical, public policy, and regulatory issues that affect the processing and combustion of waste wood for fuel.

The project's purpose was to provide environmental regulators, project developers, and others with data to make informed decisions on the use of waste wood materials as a combustion resource. Potential environmental problems and solutions were identified.

A specific project result was the identification of combustion system operation parameters and air pollution control technologies that can minimize emissions of identified air and solid waste contaminants from combustion of waste wood.

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Wood Products in the Waste Stream - Characterization and Combustion Emissions

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Wood Products in the Waste Stream - Characterization and Combustion Emissions

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