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CANDLES AND INCENSE AS POTENTIAL SOURCES OF INDOOR AIR POLLUTION: MARKET ANALYSIS AND LITERATURE REVIEW

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Prepared by

National Risk Management
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Research Triangle Park, NC 27711

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E. Timothy Oppelt, Director
National Risk Management Research Laboratory

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Abstract

The report summarizes available information on candles and incense as potential sources of indoor air pollution. It covers (1) market information and (2) a scientific literature review. The market information collected focuses on production and sales data, typical uses in the US, and data on the sources and quantities of imported products. The estimated total sales of candles in 1999 varied between $968 million and $2.3 billion, while imports were $486 million. The US imports and exports of incense in 1999 were $12.4 and 4.6 million, respectively. The scientific literature review gathered information regarding the emission of various contaminants generated when burning candles and incense, as well as the potential health effects associated with exposure to these contaminants. Burning candles and incense can be sources of particulate matter. Burning candles with lead core wicks may result in indoor air concentrations of lead above EPA-recommended thresholds. Exposure to incense smoke has been linked with several illnesses, and certain brands of incense also contain chemicals suspected of causing skin irritation.

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