

POTENTIALLY CARCINOGENIC SUBSTANCES

Benzene

Benzene is a potential leukemia producing agent. Excessive exposure may result in a number of other adverse health effects (Figure 13). Benzene may enter the body by inhalation and/or skin absorption.

At present, a small number of Company employees are potentially exposed to benzene in excess of one part of benzene per million parts of air and no employee is exposed in excess of 10 parts of benzene per million parts of air. These potential exposures result from the coke oven steel making processes, but employee protective measures are in effect. Permissible exposure limits allowed by regulatory agencies are summarized in Figure 14. The proposed standard was not upheld by the Court of Appeals because OSHA did not determine whether the benefits expected from the standard bear a reasonable relationship to the cost imposed. The case is now before the Supreme Court, which is expected to rule on it shortly.

The OSHA standard exempts employers who store, transport, distribute, disperse, sell, or use benzene as a portion of gasoline or other motor fuel after it has been discharged from a bulk terminal. This exemption was necessary since there is no known way of controlling benzene exposure among service station personnel, mechanics, or tank truck drivers. Employee Health Services has reported that no indication of excessive exposure exists for Ford employees as a result of handling gasoline.

Benzene occurs as an unintentional constituent in many materials used throughout the Company (Figure 15). Petroleum-related materials are of primary concern as they most likely contain benzene at levels that require consideration.

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