

# D R A F T

## CARCINOGENS IN THE WORKPLACE

### Introduction

The Task Force on Carcinogens in the Workplace was established during the 4th quarter, 1979 by joint action of the E&R and M&S Subcommittees. The Task Force Charter was to coordinate plans and efforts among Company activities, to identify carcinogens in use, and eliminate or control them in future products and manufacturing operations. Task Force findings and recommendations are summarized in the following pages. Detailed determinations and other relevant data are presented in the Exhibits and Appendices.

### Background

Scientific investigations into the occupational factors involved in the development of cancer, conducted in recent years, have provided evidence that occupational related cancer is a serious concern. It has been estimated that in coming decades up to 20% and perhaps as much as 40% of cancer in the U.S. might be associated with occupational factors.<sup>1</sup> Accordingly, Personnel and Organization Staff, Employee Health Services, has exerted a continuing effort to provide employee protection, as knowledge of toxic/hazardous materials has been introduced.

Public concerns relating to the control of toxic/hazardous materials, are shared by Ford, due to the Company's regard for public health and the protection of the environment and potential impact of legislation on our products and manufacturing operations. Also, the right to examine the Hazardous Materials Catalog from the Company's computer file of hazardous materials, and on-line access to the Materials and Toxicology System (MATS) has been extended to the UAW by contract.

Resolution of workplace exposure concerns relating to the management of toxic/hazardous substances, materials, and wastes, involves a consideration of the relationship between the internal and external environments. Emphasis on wastewater pretreatment standards, toxic pollutant effluent standards, nonregulated/hazardous air pollutant emissions control and solid/hazardous waste management has been increased by governmental authority. These factors reinforce the desirability of reducing the amount of residuals generated by Company manufacturing processes and operations, through more efficient manufacturing techniques as well as by materials substitution.

During the past decade, the Company was subjected to a growing number of laws which regulate material use, transport, handling, and disposal (Fig. 1). Under certain of these Acts, a "knowing/willful" criminal violation can expose individuals, including officers of the Company, to five years imprisonment. Civil and criminal penalties include maximum fines up to \$25,000 per day, and a citation normally consists of multiple related violations.

Litigation is also a growing concern. At present the Office of General Counsel has three suits pending, involving deaths allegedly due to the inhalation of carcinogenic substances. Some Workman's Compensation expense has also been incurred. The greatest potential for major expense, however, lies in the possibility of punitive action by the court.

Internal and external pressures regarding hazardous substance control and compliance have increased substantially since March, 1977, when Directive B-1X was issued to assign responsibilities within the Company (Fig. 2). Since that time new standards have been issued, additional standards are anticipated, and the level of economic risk has increased.

a Federal Register 45(15): 5031, January 22, 1980.

PAST COMPANY ACTIONS

Production

- . Removal of lead and chromium from paints.
- . Removal of "Tris" flame retardant
- . Controls instituted for asbestos in new designs.

Nonproduction

- . Removal of asbestos from,
    - Structural fireproofing
    - Thermal insulation
    - Molding compounds
  - . Substitution of vacuum for air blowing in brake and clutch maintenance
  - . *Personnel protection against benzene in light oil tanker loading operations*
  - . Substitution of lead-containing maintenance oils
  - . Substitution of benzene-containing adhesives at San Jose
  - . Reduction of lead-chromates in vinyl operations
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## PAST COMPANY ACTIONS

### Production Materials

In response to OSHA regulations in 1978, the Company removed lead chromates and lead molybdates from paint used for topcoats on exterior and interior surfaces, effective with Job #1, 1980. School bus yellow and fleet vehicles were excepted. Also, "Tris" flame retardant treatment for fabrics, was removed during 1977, in response to an inquiry by NHTSA. In response to initial OSHA regulations in 1972, the Company determined plant areas in which employee exposure to asbestos exceeded regulated limits. All domestic line operations were apprised of the OSHA standards and the requirements for employee protection and medical examination. Car Engineering released a practice banning new designs containing asbestos unless documented rationale for its use is provided and it is encapsulated.

### Nonproduction Materials

In 1969, sprayed-on structural steel fireproofing containing asbestos fibers was eliminated in all new and reworked construction. In 1970, Corporate mechanical construction standards were revised to prohibit asbestos in thermal insulation. Maintenance Bulletin No. 137 was published, prohibiting the use of air blow-off in all brake/clutch maintenance and substituted vacuum fiber/dust pick-up. In 1974, Steel Division light oil by-product tanker loading operations were reviewed and personnel exposures were pinpointed and appropriate protective equipment supplied. In 1977, the Company replaced M-2C60 Series of maintenance lubricants with the lead naphthenate free M-2C142 materials, and deleted the use of asbestos bearing molding compound at Sheldon Road. In 1978, an adhesive used at San Jose was reformulated to eliminate benzene exposure. During 1979, analytic chemistry procedures at Central Laboratories was revised to eliminate benzene, the volume of lead-chromate employed in vinyl plant operations was reduced and ventilation/protective measures were identified at the Romeo Tractor Plant to minimize hazards from chromium compounds used in painting. (The substitution of non-hazardous paints is targeted for Romeo for late 1980.)

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