

September 20, 1977

All Employees

This letter is for your information on the results of the environmental health testing done in our plant last year, on the consequences of being overexposed to the chemicals or sound and the steps taken to control overexposure. Agents and contaminants surveyed included methyl chloride, dimethyl ether, vinyl chloride, propylene oxide, Methocel® dust, ethanol (Tecsol), acetone, and noise levels.

- A. Reactor Chemicals Study - The updated survey in the reactor section showed methyl chloride, dimethyl ether, vinyl chloride, and propylene oxide to be within their respective limits.

Toxicology -

MECL, DME, Vi, PO - reactor section

Methyl Chloride is a colorless gas with no odor at lower concentrations. It, along with all gases in liquid state, causes frostbite and exposures at lower concentrations affect the central nervous system. At higher concentrations, 1000 ppm, the nervous system, heart, lungs and kidneys can be affected. Symptoms of exposures over 200 ppm over eight hours are drowsiness, dizziness, misty vision, mental confusion, staggering gait and slurred speech.

The TLV for MECL is 100 ppm and our level runs about 11 ppm.

DME is a colorless gas with an ethanal odor. It causes frostbite on gross contact and overexposure symptoms are drowsiness and respiratory failure at higher concentrations.

The TLV for DME is 400 ppm and our TWA level is typically about 8 ppm.

Vinyl Chloride has properties much the same as methyl chloride. Vinyl chloride has a very low TLV (1.0 ppm) because of some industrial-related liver cancers observed in workers exposed to moderate levels of vinyl chloride over a long period of time. Our levels run less than .1 ppm.

PO is a colorless liquid with an alcoholic odor. Propylene oxide causes burns if held in contact with the skin and eye irritations or damage if gotten into them. PO will cause serious systemic damage if swallowed or absorbed by the skin.

The TLV for PO is 100 ppm and our levels genally run 2.0 ppm.

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