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October 4, 1957

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Anniston

TOXICITY OF MONTARS

The American Conference of Governmental Hygienists in their annual publication of hygienic standards for an 8-hour working day lists Aroclor 1254 at 0.5 milligrams per cubic meter. Von Oettingen in "The Halogenated Hydrocarbons" states that chlorinated naphthalenes also should be kept at or below 0.5 milligrams per cubic meter. It is therefore safe to assume that for an 8-hour working day Montar vapors should be kept at or below this particular figure.

If you use Pentachlorinated terphenyl as your standard, 0.5 milligrams per cubic meter represents somewhere in the neighborhood of 0.03 parts per million. This information indicates that these vapors can be seriously toxic on a chronic basis. To prevent this, effective ventilation must be installed. If the present hoods over the drums when Montars are drawn off the stills are not drawing sufficient air then they should be immediately corrected. If individual workers must work around these drums during residue draw, they should be supplied with organic vapor cartridge respirators. These respirators should be worn any time the operators are exposed to the fumes from the hot residue.

If adequate ventilation is provided and adequate protective equipment given the operators who are individually exposed, then no exposure hazard should exist in this department.

The Montar fumes cannot be analysed for by the chlorinated hydrocarbon method because there is too much other chlorinated material in the area. This would very seriously affect the equipment used for this purpose and the results would be impossible to interpret.

It is again our opinion that adequate ventilation must be provided and personal protective equipment where it is necessary. If these provisions are followed no difficulty should be experienced in handling these residues.

R. Emmet Kelly, M.D.

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