MAR 2 1973

ALLIED CHEMICAL CORPORATI

vcm file

MEMORANDUM

March 1, 1973

MEMO TO: Mr. W. S. Ferguson

FROM: W. A. Knapp

SUBJECT: Vinyl Chloride Monomer (VCM)

Pursuant to your request, the following is a brief summary of status of industry supported MCA studies and of propellant use of VCM.

With respect to MCA study, a delegation headed by Dr. Torkleson (Dow) visited the European toxicology project at Milan and reported satisfaction with work but a question concerning exposure of food and bedding to the toxicant, a practice not practiced in inhalation studies here. To resolve this question, the MCA study will include one group of animals (highest inhalation level only) with food and bedding similarly exposed. Present MCA study to be conducted by Industrial Biotest now includes 12 month inhalation to 5000, 500 and 50 ppm with three species (mice, rats and hamsters). Some 2400+ animals will be used.

Four epidemiological consultants were invited to the February 20 meeting to explore possibilities and costs in this area. They were Tabershaw, Harvard, a Nebraska firm represented by Dr. John Keller and U. of Mich. represented by Dr. Ralph Smith. The most recent results of Italian study were not disclosed to the consultants, the concern of the industry being based on the original Viola article and the expectation that Dr. Viola will have further results at a symposium to be held in the fall of 1974. There is also the possibility that TLV for vinyl chloride may be further lowered based on the Torkleson et al work of 1961 (Am. Ind. Hyg. Assoc. J. 22, 354-61 (1961).

The epidemiologists were requested to submit programs by March 9 and an MCA meeting arranged shortly thereafter, possibly on March 13.

Concerning use of VCM as aerosol propellant, it was opinion of those present (Research Coordinators) at the January 30 meeting that serious consideration should be given to withdrawal from this market since value of market was limited and potential for liability great. The TLV is now reduced to 200 ppm and there is a probability that this will be reduced further. It is not reasonable to recommend propellants with low TLV's. The writer believes that a decision to suspend sale should be executed by personal visits to substantial fillers (or marketers) using this propellant.

At present, SCD purchases aerosol grade VCM from Dow on a swap arrangement and from Ethyl Corporation. ICD product is not suitable for aerosol use due to very low concentrations (ppm) of butadiene and/or butenes which polymerize.

WAK:md

W. A. Knapp

cc: Mr. E. W. Callahan