Manufacturing Chemists Association

Minutes of Meeting

VINYL CHLORIDE RESEARCH COORDINATORS

MCA Conference Room — Washington, D. C.

November 14, 1972

PRESENT:

B. F. Goodrich Chemical Company, A Division of The B. F. Goodrich Company	W. E. McCormick
The Dow Chemical Company	T. R. Torkelson
Ethyl Corporation	W. E. Rinehart
PPG Industries, Inc.	Z. G. Bell, Jr.
Shell Chemical Company	R. L. Maycock
Union Carbide Corporation	R. N. Wheeler
MCA Staff	K. D. Johnson
~~B. F.~~ UNIROYAL	W. O. HARRIS

GUEST PRESENT:

ICI Mond Division	D. M. Elliott

URL 02438

1. Election of Chairman

The meeting was convened at the adjournment of the session of the Technical Task Group on Vinyl Chloride Research meeting, with Dr. Johnson serving as chairman protem. In response to his call for nominations for a permanent chairman, Dr. T. R. Torkelson was nominated and elected without dissenting vote. Dr. Torkelson then assumed the chair for the remainder of the meeting.

2. Revision of Proposed Test Protocol

2.1 Selection of Exposure Levels

Consensus was achieved on a set of exposure levels that would (1) provide reasonable assurance of demonstrating a no-effects level, (2) extend high enough to constitute persuasive evidence of an adequate margin

of safety in present standards should results at the highest levels prove negative, and (3) demonstrate a dose response relationship over a useful range of concentrations in the event of positive findings. The three exposure levels best meeting these criteria were judged to be

Highest Level -- 5,000 ppm
Intermediate Level -- 500 ppm
Lowest Level -- 50 ppm.

2.2 Selection of Material Source

All agreed that, in the light of current data, there remained no compelling justification for duplicate test programs with acetylene and ethylene derived vinyl chloride monomer. The offer of PPG Industries to provide material for the exposures was accepted by the Research Coordinators.

2.3 Selection of Test Species

Telephone consultation with Industrial Biotest confirmed the Research Coordinators' estimates that exposure chamber space was adequate to add a third small rodent species to each of the chambers, and that, if this were done without increasing the total animals involved (2000 animals for the four exposure groups plus control included in the basic research package, but not including the additional group of animals proposed to be paid for by separate contributions from producers of acetylene derived vinyl chloride) any change in project costs would be in the downward direction. Hamsters or gerbils were mentioned as possible candidates for the third species, with final selection to be made after consultation with Industrial Biotest.

2.4 Protocol Summary

The proposed protocol would thus provide for the following exposures:

		Animals (Equally divided as to sex)			
Chamber	VCM Concentration	Rats	Mice	Hamsters(?)	Total
1	control	200	200	100	500
2	50 ppm	200	200	100	500
3	500 ppm	200	200	100	500
4	5,000 ppm	200	200	100	500
		800	800	400	2,000

3. Epidemiological Studies

The Secretary was asked to solicit proposals for an industry wide epidemiological survey to determine whether or not there was an increased incidence of malingnancy among workers exposed industrially to vapors of vinyl chloride monomer. The following organizations were mentioned as competent to design and perform such a study:

The Epply Institute
Stanford Research Institute
Harvard University's School of Public Health
University of Michigan's School of Public Health
Kettering Institute
Tabershaw Cooper.

After proposals have been received from a suitable number of offerers, the Research Coordinators will formulate a recommendation to the Technical Task Group on Vinyl Chloride Research on action to be taken.

4. Metabolic Studies

Discussions on the justifications for and design of comparative studies on the metabolism and detoxication of vinyl chloride monomer in experimental animals and man were postponed until early results from the chronic exposure studies are available for review.

5. Literary Survey

Dr. Torkelson expressed his opinion that the available literature on the toxicology and metabolism of vinyl chloride monomer was relatively limited, but offered to have the Dow library prepare a compilation. The bibliography when compiled, will be distributed to both the Research Coordinators and the Technical Task Group.

6. Schedule

The Research Coordinators expressed their hope that the animal exposure program could be started as soon

as possible in 1973.

Respectfully submitted,

K. D. Johnson / KRB

Kenneth D. Johnson
Secretary
Vinyl Chloride Research
Coordinators

Minutes Subject to Approval
December 6, 1972
KDJ:mkb