

OCT 30 1969

MANUFACTURING CHEMISTS ASSOCIATION

1825 CONNECTICUT AVENUE, N. W. - WASHINGTON, D. C. 20009

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MINUTES OF MEETING

SAFETY AND FIRE PROTECTION COMMITTEE

TASK GROUP ON HANDLING OF VINYL CHLORIDE TRANSPORTATION EMERGENCIES

Washington, D.C.

October 27, 1969

PRESENT

R. F. Schwab	Allied Chemical Corporation
G. Kitazawa	Borden Chemical Company
H. D. Butter	Continental Oil Company
R. L. Daniel	Dow Chemical Company
S. M. MacCutcheon, Chairman	Dow Chemical Company
✓ J. H. Rains	Ethyl Corporation
L. B. Crider	B. F. Goodrich Chemical Company
D. L. Dowell	B. F. Goodrich Chemical Company
J. R. Little	Monochem Incorporated
W. L. Hammond	PPG Industries
F. H. Moulton	PPG Industries
T. G. Taylor	PPG Industries
M. E. Sutherland	Union Carbide Corporation
M. J. Kleinfeld	Uniroyal, Chemical Division
A. L. Kling	Society of the Plastics Industry
H. L. Baker	Tenneco Chemicals Incorporated
P. M. Reed	Tenneco Hydrocarbon Division
M. E. Wagshul	Tenneco Plastics Division
F. G. Stephenson, Secretary	Manufacturing Chemists Association

Mr. F. G. Stephenson opened the meeting at 10 A.M. He stated that the task group had been organized as an activity of the Safety and Fire Protection Committee. He advised that the duties of the task group must be limited to discussions of the transportation emergency problems of Vinyl Chloride. It will prepare and submit a report for approval by the parent committee.

Mr. S. M. MacCutcheon was nominated Chairman of the Task Group. He introduced the subject by asking for a detailed description of the Glendora, Mississippi derailment. Mr. Kleinfeld stated that the derailment occurred at about 3:30 P.M. and was caused by rapid braking of the train. Three tank cars of Vinyl Chloride however were among those which were derailed. One was leaking and a fire started some hours later when a lineman was attempting to clear tree branches from the electric lines. Mr. Little, Manager of the Monochem plant from which the material was shipped was called by a representative of Illinois Central who recommended partial unloading of the derailed cars so that they could be hoisted back onto the track. Adjacent cars contained methanol, tetra-ethyl lead and diesel fuel.

The fire involving the leaking VCM car enveloped the adjacent VCM car which later exploded. The car head was blown about 600 feet. The third VCM

car which was leaking from a valve commenced to burn, and continued to burn for about four days.

Because of the growing fear that the smoke cloud from the fire contained phosgene, authorities decided to evacuate the civil population within a radius of 25 miles. (Note: The "panic" situation is considered to have been aggravated because of the recent reports of military movement of phosgene on the railroads).

Regarding this decision to evacuate the civil population, Mr. Kleinfeld considered that the authorities acted "as they had to". During discussions which followed, no task group member expressed an opinion that the evacuation was not necessary, though some members thought a radius of five miles would have been sufficient.

The task group then discussed the products of combustion of VCM. There were varying opinions as to the percentage of phosgene which the VCM fire cloud at the derailment scene may have contained. There was a consensus that the main constituent of the cloud would be hydrogen chloride and that this in itself would present sufficient hazard to justify evacuating of the civil population. Additional hazards would result from the presence of carbon monoxide. The task group was advised that two hogs in the general area had died and that death had probably resulted from carbon monoxide.

Mr. Kling stressed the desirability of making a qualitative analysis of the fire gases at the site.

Mr. Taylor described another incident (on July 3, 1969) when 4 VCM tank cars overturned in a derailment accident. An exceptionally hazardous situation might have developed because an attending fire company announced its intention to pump the VCM out of the cars into a ravine and to burn it. Any such attempt might have caused a severe explosion of flammable gases probably resulting in loss of life.

The discussions of the task group then reverted to a consideration of the products of combustion of VCM and to the possible development of a cooperative arrangement of emergency "mutual assistance" between manufacturers of VCM.

Mr. Little emphasized the importance of making sure that railroad personnel retain authority over the accident situation and that chemical company personnel simply give advice and assist as required. This may avoid legal complications.

Then followed some discussion of the possible legal complications. It was pointed out that the Chlorine Institute has sponsored a "mutual aid" system among its members for the handling of chlorine accidents and that no legal suits (arising out of the voluntary assistance of one company at an accident involving another company's product) have occurred.

Mr. Stephenson advised that MCA had given much thought to legal aspects at the time of the introduction of the Chem-card program and that MCA's legal adviser was of the opinion that while legal problems undoubtedly exist these are outweighed by the moral and public relations advantages gained.

It was then unanimously resolved to create three subgroups as follows:

- Subgroup A. To accumulate information on VCM transportation accidents.
- Subgroup B. To establish emergency procedures for VCM transportation accidents, including recommendations for handling different types of accidents, e.g., where fire is or is not involved.
- Subgroup C. To prepare a report on the chemistry of the combustion products of VCM.

Mr. S. M. MacCutcheon named the membership of each subgroup as follows:

- Subgroup A. Mr. A. L. Kling, (Chairman) (Society of the Plastics Industry)
Mr. R. L. Daniel, (Dow Chemical Co.)

All members of the full task group are invited to forward case histories of VCM accidents to Mr. Kling for distribution.

- Subgroup B. Mr. D. L. Dowell (Chairman) (B. F. Goodrich Chemical Company)
Mr. H. D. Butter, (Continental Oil Company)
Mr. J. R. Little, (Monochem Incorporated)
Mr. J. H. Rains, (Ethyl Corporation)
Mr. P. M. Reed, (Tenneco Hydrocarbon Division)
Mr. M. E. Sutherland, (Union Carbide Corporation)
Mr. T. G. Taylor, (PPG Industries)

- Subgroup C. Mr. L. G. Crider (Chairman) (B. F. Goodrich)
Mr. R. L. Daniel (Dow)
Mr. G. Kitazawa (Borden)
Mr. M. J. Kleinfeld (Uniroyal)

Mr. Stephenson advised committee chairmen that they should operate in accordance with MCA established procedures. Specifically Mr. Stephenson should be advised of any meetings which are contemplated and should have the opportunity to attend. Copies of all correspondence should also be sent to him.

Chairmen were asked to hold meetings as soon as possible, and it was arranged that a meeting of Subgroup B will be held at the Royal Orleans hotel in New Orleans on November 7.

Mr. MacCutcheon asked the chairmen to be prepared to submit reports on subgroup activities at a full task group meeting to be held in mid January 1970.

Interest was expressed in making a list of telephone numbers available to the American Association of Railroads. These phone numbers could be used by AAR whenever advice on the handling of VCM transportation emergencies is needed. The secretary asked each participating company to contact him in writing, listing such numbers and stating whether or not the company is prepared to offer advice on the handling of an emergency involving another company's product.

The meeting adjourned at about 3 p.m.

SAFETY AND FIRE PROTECTION COMMITTEE

TASK GROUP ON HANDLING OF VINYL CHLORIDE TRANSPORTATION EMERGENCIES

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FGS:is 10/27/69