

4-13-71

REPORT OF THE PVC FIRE SAFETY COMMITTEE
TO THE
VCM/PVC PRODUCERS GROUP

SUMMARY:

The first step has been taken in organizing a PVC Fire Safety Committee as a part of the PVC/VCM Producers Group. This new committee has had its first meeting and has identified in a general way the scope of its work and its technical, marketing and communications objectives. The PVC Fire Safety Committee has also formed a technical subcommittee, a Use-Practices (Marketing) Subcommittee and a special Conduit Subcommittee (to deal with a current critical issue) and a Steering Committee. Each of these subcommittees have been active and the results of their efforts are described.

This report has three parts. Part one is a chronology of how we got to where we are. Part two is a report of activities to date and part three contains some comments as to future activities.

CHRONOLOGY OF ACTIVITY

Following the recommendation of the PVC/VCM Producers Group that consideration be given to forming a PVC Fire Safety Committee the following has occurred:

An exploratory meeting was held in Cleveland on November 10, 1976. Representatives from eleven PVC producers attended. At this meeting the following was accomplished:

- 1) Combustibility issues and problems were identified.
- 2) Influential groups (fire community, code officials etc.) who are concerned about combustibility problems were identified.
- 3) Agreed there is a need to assemble facts and to communicate these facts.
- 4) Established a Steering Committee to outline the scope and objectives of a PVC Fire Safety Committee.

On February 15, 1977 the Steering Committee met and addressed itself to the task of developing a proposal for consideration by the full committee. A proposal was developed which included a suggested organization, a definition of the scope and objectives of the committee, and a list of action elements.

On March 8, 1977 the first meeting of the full PVC Fire Safety Committee was held at Hill & Knowlton. Fourteen PVC producers sent representatives. Representatives were also present from SPI, PPI, NEMA and Hill & Knowlton.

The following was accomplished:

- 1) Reviewed the proposed reorganization of the PVC/VCM Producers Committee.
- 2) Reviewed the role of SPI on combustibility issues with special attention to the role of the Coordinating Committee on Consumer Safety--the committee which has been overseeing most of the plastic combustibility research to date.

- 3) Discussed in depth the immediate critical problem generated by the proposal of the steel industry to ban the use of non-metallic (PVC) electrical conduit in exposed areas from the National Electrical Code. Developed proposals for solution. Established a Conduit Subcommittee to deal with this problem.
- 4) Discussed the proposed objectives of the PVC Fire Safety Committee which are currently defined as follows:

OVERALL OBJECTIVE

Establish the PVC Fire Safety Committee as an influential body that is objective, responsible and credible.

TECHNICAL OBJECTIVES

Define the characteristics of PVC in fires.

Identify and evaluate current problems - technical political and public relations.

Identify and evaluate available technical information. Determine what technical possibilities and alternatives exist that can be used to deal with identified problems.

Established a technical subcommittee to deal with the above.

MARKETING OBJECTIVES

Develop information that will enable us to market our products effectively and safely.

Develop fire related use practices for PVC. Provide notices as to safe and proper product use (i.e., labeling, warnings, caveats, position papers, etc.).

A Use-Practices Subcommittee was established to deal with this area.

COMMUNICATION OBJECTIVES

Our goal is to deal with the combustibility characteristics of PVC in such a way that we can maintain and expand the market for the proper use of PVC. To gain this increased acceptance we are aware we must be able to communicate the necessary information to those influentials who need it, i.e., fire service officials, regulators, etc... We propose

to accomplish this by working with the Public Relations and Health Committees. We recommend that each of these committees have a representative on the PVC Fire Safety Committee.

The Steering Committee will remain intact and will be responsible for liason with the Coordinating Committee on Consumer Safety for guiding the deliberations of the full committee and for communications between the PVC/VCM Producers Committee and the PVC Fire Safety Committee.

In summary, a PVC Fire Safety Committee has been formed. This committee has identified certain targets and objectives and established working subcommittees to deal with them. The working subcommittees are: Conduit, Technical and Use-Practices.

A motion was made and passed by the full committee that a report detailing the above be made to the VCM/PVC Producers Group during its meeting on April 13, 1977.

REPORT OF ACTION OF SUBCOMMITTEES

Conduit Subcommittee of the PVC Fire Safety Committee

1. The Steel Rigid Conduit Section of NEMA sponsored a project at Factory Mutual Research entitled, "The Effects of Fire-Exposed Electrical Wiring Systems on Escape Potential from Buildings". This report which is detrimental to PVC conduit and wiring was reviewed in a meeting with the principal investigators and with John Rhodes - President and William Marsh - Vice President, Administration, of Factory Mutual.

We criticized the report as lacking objectivity and stated that we felt the conclusions were not supported by the data. The most critical aspect of the report has to do with the toxicity of combustion products and we questioned the expertise of FM personnel to extrapolate results in the area of human toxicity. We also expressed concern about the fact that this report was being used to justify modifications of the National Electrical Code.

2. We met with Baron Whitaker, President of Underwriters Laboratories and William Christian, Consulting Engineer of UL to review the conclusions of an Advisory Committee report on "Combustion Products from Polyvinyl Chloride in Building Construction". This report points out that there is no evidence from experience that PVC conduit presents a fire hazard when installed in conformity with the present code provisions and we wanted permission and support to use it as rebuttal to the steel industry sponsored Factory Mutual report. Approval and support given.
3. The Conduit Subcommittee has had several meetings and have:
 - a. Developed a draft for a brochure discussing PVC conduit and the National Electrical Code. This will be printed and distributed in advance of and during the NFPA meeting.

UCC
008739

- b. Drafted a letter which is designed to be sent to organizations that will be voting at the NFPA meeting.
- c. Printed the UL Advisory Committee Report as a pamphlet. It will be used to rebut the FM report.
- d. Outlined a plan for floor actions, if required, at NFPA Annual Meeting.

Technical Subcommittee

The committee has not had a meeting but they do plan to meet before the end of April. In the meantime they are reviewing an extensive bibliography dealing with the PVC/fire situation. In addition a letter has been sent by the subcommittee chairman which points out that the subcommittee is also charged with monitoring current research at various universities and governmental laboratories and that their objective is to define the relative role of PVC in an unwanted fire.

Use-Practices Subcommittee

This committee held their first meeting on April 7th and accomplished the following:

- 1) Reviewed ways in which the committee could function.
- 2) Compiled a list of basic objectives:
 - Focus on marketing aspects to secure the position of PVC in the marketplace.
 - Provide notice to ultimate users as to safe and proper product use.
 - Effectively present information to ultimate end users, fire community, code developers legislators, etc.
 - Evaluate specific end uses to determine relative hazards. If hazards exist, then prepare proper recommendations.
 - Develop risk-benefit programs.

- 3) Discussed a series of individual projects.
- 4) Reviewed and forwarded comments on the letter and brochure being prepared by the Conduit Subcommittee.

Future Plans

We plan to schedule a meeting of the full committee on or about the 5th of May.

We will encourage members to participate at the SPI Suite during the NFPA meeting in Washington during the week of May 15th.

We also plan to hold a summer meeting at the University of Utah. This will include a tour of the Flammability Research Center, which is probably the most sophisticated in the world and a presentation by Dr. Einhorn and his staff directed especially to the physiological and toxicological aspects of the combustion products from PVC.

It is likely that as we become functional we will want to initiate/support certain technical investigations and prepare certain publications. We anticipate there will be a need to request funds. Requests for funds during the first year will likely be on a project to project basis.

Daniel L. Kent
April 13, 1977

UCC
008741