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Sherry M. Carr

FALL CONSULTANTS MEETING

O'Hare Hilton Hotel
O'Hare International Airport
Chicago, Illinois
Room 2111

Tuesday
October 24, 1989
9:00am - 2:30pm

Attendees:

Richard Church, Plastic Pipe & Fittings Association (in part)
Fred Clarke, Benjamin/Clarke Associates
Don Goodman, Occidental Chemical Corporation
Roy Gottesman, The Vinyl Institute
Steve Hookanson, Vista Chemical
Peter Lloyd, BFGoodrich Company
Al Reventas, Shintech Inc.
H. Patrick Toner, Society of the Plastics Industry Inc.
Joe Zicherman, IFT Technical Services

I. SELF-INTRODUCTIONS AND OPENING OF MEETING

Following self-introductions and an indicating of the fire exits, Roy Gottesman advised the group that the purpose of the meeting was three-fold:

- A. To review code activities being carried-out within the Vinyl Institute, and to determine how better to coordinate these activities with related organizations and within the overall SPI program.
- B. To discuss approaches to overcoming code restrictions which limit the use of vinyl plastics.
- C. To discuss any pro-active areas that should be encouraged in order to expand uses of vinyl.

II. REVIEW OF CURRENT VI CODE ACTIVITIES

A. ICBO/IAPMO

Joe Zicherman reported on the winter meetings of ICBO and indicated that a PPFA-sponsored change in an attempt to

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clarify the code was disapproved at the winter meeting, challenged at the fall meeting, but did not ultimately get approval. A challenge to allow CPVC pipe in plenums under the mechanical code was disapproved at the winter meeting, but was successfully challenged from the floor at the fall meeting due to the efforts of Goodrich.

IAPMO activity relates to plastic piping in combustible construction. Joe Zicherman reported that PB supply piping was ruled out of the IAPMO code last year, and an attempt to bring it back at the last IAPMO meeting in late September was unsuccessful. He also noted that problems relating to ABS surfaced at the recent California EIR meetings and related to IAPMO certification and labeling of ABS products.

The winter meetings of IAPMO will take place in Boise, Idaho in January and when proposed code changes are obtained, Joe Zicherman will provide them to the Vinyl Institute.

Assignments:

1. Joe Zicherman is to provide his reports on the fall ICBO and IAPMO meeting.
2. Roy Gottesman will see that the reports from Joe Zicherman are circulated including one to SPI via Pat Toner.

B. ANSI A-40

This is an attempt by ANSI to promulgate a national plumbing standard. It basically uses IAPMO-type language. This is to be issued and will be sent to ANSI without combustible construction limitations. The sponsors are a contractors association. This issue is being followed by PPFA and Dick Church agreed to advise the Vinyl Institute and SPI of progress on this front.

Assignments:

1. Dick Church and PPFA will advise of activities relating to IAPMO and will also follow progress relating to the ANSI A-40 standard and will advise the Vinyl Institute and SPI on significant actions.

C. BOCA/SBCC

Fred Clarke reported that new code proposals for the next cycle of BOCA are expected in November and the code

proposals for the current cycle are not yet out for SBCC. Fred Clarke observed that the main focus of these codes is what should be sprinklered and what should not. What has now surfaced is whether telephone switching rooms should be sprinklered. Pipe issues are also related to sprinklers and the question is whether the Vinyl Institute should take a position and heavily support sprinkler installations.

He noted that he does not expect PVC issues to be dominant in either of the new code proposals from BOCA or SBCC.

D. NEC (NFPA)

Fred Clarke noted that the 1990 National Electrical Code is now off the press, and that the new proposals for the next three-year cycle will start to come in after the first of January 1990. Submissions are due by October/November 1990. The issue most likely to surface relates to the Union Carbide proposal for "reduced emission" categories. This was not accepted by the National Electrical Code in the last cycle, but a category of limited smoke (LS) was established. Left unstated at that time was what tests should be used to define the LS category.

A UL committee is trying to develop defining tests and UL 1581 (vertical shaft test) is being used to measure smoke. There are some 30-35 test runs to be carried out, which will serve to define the test, the limitations of such testing, and the ranges that will define criteria for this category. It was noted that UL is not prepared to sacrifice physical properties. Essentially, they want the same physical properties with lower or limited smoke generation. Union Carbide seems to be opposed to having physical properties contained in a definition of the LS category, and have threatened to "walk away" from the UL committee. While it is too soon to say what the 1993 NEC will do, and in large part this depends on how the UL program comes along, it can be expected that there will be code proposals related to limited smoke products in health care and public assembly facilities.

Relating to the solid waste issue, this is considered not to be code-driven, but will be reactive based on restrictions that result from legislation.

E. SPI Code Programs

Pat Toner reported that through the technical operations, there is core funding for three consultants:

1. Bill Dunlap, formerly with Dow, who monitors the BOCA and SBCC codes and reports to the Coordinating Committee on Fire Safety.
2. Gus Degenkolb, who monitors ICBO, and also sits on BCMC and NFPA Committee 101.
3. Al Hogan, who has the responsibility for intelligence gathering relative to fires. He is the "eyes and ears" into the fire marshals' offices and is the Code Chairman of the International Association of Fire Chiefs.

Both Degenkolb and Hogan have long-established connections with the fire community.

As relates to building codes, Pat Toner indicated that there is a an SPI Joint Committee on Foam Plastic Insulation with representation from the Polyurethane Division, the EPS Division and the Phenolic Foam Division. He noted that at present, there are no pipe issues or DWV issues being handled within SPI. Further, he noted that the Wire and Cable Code Committee within the Fluoropolymers Division have used Joe Reed and Don Bellas to work with them on specific ASTM issues.

Pat Toner reported on the recently-established Polyolefins Performance Council. Because there are potential conflicting interests within the various SPI divisions, he noted that a Wire and Cable Coordinating Committee to include representation from the Vinyl Institute, the Fluoropolymers Division and the Polyolefins Division will hold its first meeting on November 10th. He would like to see NEC coordination for SPI carried out via this new coordinating committee. He feels that in so doing the overall interest of the plastics industry will be better represented.

Because of Mr. Toner's observations that the Dunlap reports on BOCA and SBCC were quite similar to those provided to the Vinyl Institute by Fred Clarke, and in order to assure that there is no duplication but better coordination on such code-monitoring activities, Pat Toner will advise Bill Dunlap to meet with Fred Clarke to decide upon how best these code bodies can be handled.

Assignments:

1. Pat Toner is to advise Bill Dunlap to contact Fred Clarke and Fred Clarke is to arrange for a meeting

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to allow these two consultants to better coordinate their activities.

2. Pat Toner is to advise Gus Degenkolb of Joe Zicherman's consultation on ICBO/IAPMO matters for the Vinyl Institute.
3. In future letters to Roy Gottesman relating to his consulting on ICBO/IAPMO matters, Joe Zicherman will send copies to Pat Toner, so that he can advise Gus Degenkolb.

III. APPROACHES TO OVERCOMING BUILDING/ELECTRICAL/MECHANICAL CODE RESTRICTIONS ON PVC PIPE, TUBING AND CONDUIT

Fred Clarke noted that the three-floor restrictions have been removed in the NEC as a result of the Carlon appeal. In general, it is his feeling that tubing and conduit get a lot of input that can best be carried out by suppliers. He stated that BFGoodrich and Carlon handle their own specific code issues individually and do this well. As a mechanism, he advocates using the Toxicity Advisory Committee of NFPA as Carlon has done in the past to get a systematic review on issues. He feels that this approach has not been exploited by SPI members and recommended its use. The code panels of NEC do not reverse the recommendations of the Toxicity Advisory Committee of NFPA. By extension, he suggested that the research committee of ICBO could be used in a like manner. According to Joe Zicherman, the risk assessment committee of ICBO develops code language, but they are not an advisory committee as is the Toxicity Advisory Committee of NFPA.

The PPFA has issued a second edition of its "Pipe Manual", and this is back at the National Research Evaluation Service of CABO, where it was being held up by ICBO for administrative reasons. It is hoped that final approval can be obtained after January 1, 1990. Positive pressure tests, which are now required, would be grandfathered should this be adopted.

IV. REPRESENTATION ON NEC PANELS

It was noted that at the present time, Charles Forsberg represents the Vinyl Institute on NEC Code Panel 8 and Ron Bishop, also of Carlon has recently been approved for NEC Code Panel 3. The necessity for instructing these code panel members so that they take a broad plastic viewpoint was noted, including the necessity for them to be advised that they are not to take positions against other non-vinyl materials. The desirability of having representation on Code Panel 6 and Code Panel 16 was reviewed, and Vista Chemical will nominate a person for Code Panel 6 and Goodrich will do likewise for Panel 16.

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Assignment:

Roy Gottesman will provide application forms for the above panels to Steve Hookanson at Vista Chemical and Peter Lloyd at BFGoodrich who have the responsibility of determining who their respective representatives will be for completing the application forms and returning them to Roy Gottesman, so that they can be submitted to NFPA.

V. SMOKE HAZARD ASSESSMENT - CARLON NEAT-BASED WIRING SYSTEM REPORT

Fred Clarke reviewed the background on this document and not d that aluminum or steel with THHN wiring performs more poorly than a fluoropolymer in UL 910 test, which is a 25-foot tunnel test. The real problem, unanticipated by the work at UL, is that the wiring system, which was thought implicitly t pass this test, does not in actual practice. It was questioned as to whether this is a new finding for THHN wire. Based on the tests employed and the results obtained, the Vinyl Institute has no comment relative to the desirability of having this information published which would lend support for an NEAT overall system. However, in view of the results obtained with a now-UL approved system, it was recommended that Fred Clarke advise Carlon to obtain a view from UL regarding such a publication.

Assignment:

Fred Clarke is to advise Carlon of the above considerations and recommend that they obtain UL approval for their publication.

VI. REVIEW ARTICLES ON FIRE PERFORMANCE, PVC PIPING - STATUS REPORT

Joe Zicherman reported on these publications which will result from the joint Vinyl Institute/PPFA Fire Test Program. He noted that the review article is in its fifth draft and will include an introduction, the history of PVC, fire endurance issues, fire stopping approaches, results of recent testing, supply and sprinkler piping, information on field data including trends and product development, codes and standards - an indication of the model codes and their provisions and an overall conclusion. The review articles will contain an extensive bibliography.

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Assignment:

Joe Zicherman has the assignment to complete this review article and to submit it to Roy Gottesman by November 30th for legal review and approval.

VII. SUMMARY AND REVIEW OF ASSIGNMENTS

- A. Dick Church will advise the Vinyl Institute/SPI of activities as they emerge from PPFA's monitoring and actions at IAPMO/ICBO.
- B. Joe Zicherman is to provide reports of the recently-concluded ICBO/IAPMO code meetings.
- C. Pat Toner is to advise Bill Dunlap to contact Fred Clarke for coordination of monitoring activities at BOCA and ICBO.
- D. Fred Clarke is to arrange for a meeting with Bill Dunlap and to issue a report on their agreed-upon "modus operandi".
- E. Pat Toner is to advise Gus Degenkolb regarding the consulting activities of Joe Zicherman on behalf of the Vinyl Institute.
- F. Steve Hookanson is to determine who will represent Vista Chemical on NEC Code Panel 6, have the application form completed and have same submitted to Roy Gottesman for transmittal to NFPA.
- G. Peter Lloyd is to establish who the Goodrich representative NEC Code Panel 16 will be, arrange for completion of the application, and have that submitted to Roy Gottesman for transmittal to NFPA.
- H. Fred Clarke is to advise Carlon regarding the Vinyl Institute's review on its proposed paper relating to the NEAT-based wiring system, particularly as it relates to obtaining a UL approval.
- I. Joe Zicherman is to provide a draft of his review paper on "Fire Performance of PVC Piping" to Roy Gottesman by November 30th.
- J. Liaison with the consultants will be carried-out by Al Reventas on pipe issues with Joe Zicherman, and Steve Hookanson with Fred Clarke on electrical materials issues.

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- K. Because it was considered that a meeting of this type to coordinate efforts is very worthwhile, Pat Toner and Roy Gottesman will establish a suitable date for a spring meeting, at which time both the Vinyl Institute and SPI consultants will be invited to attend.

The meeting was adjourned at approximately 2:20 p.m.

Respectfully submitted,

A handwritten signature in cursive script that reads "Roy T. Gottesman".

Roy T. Gottesman

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