

EXECUTIVE BOARD MEETING

Wyndham Greenspoint Hotel
12400 Greenspoint Drive
Houston, Texas

Wednesday
December 13, 1989
8:00 a.m.

Attendees:

John Avento, M & T Chemicals
J. Alan Bailey, Occidental Chemical
Frank Borrelli, Georgia Gulf
Greg Boyd, Kaneka Texas
Chuck Bush, BFGoodrich Company
Bill Carroll, Occidental Chemical
Peter de la Cruz, Keller and Heckman
Fred Fisher, Air Products & Chemicals
Rick Flammer, Vista Chemical
Roy Gottesman, Vinyl Institute
Fred Krause, BFGoodrich Company
George Kuzma, Lucidol Division of Pennwalt
Donna Magill, PPG Industries
Ed Martinelli, BFGoodrich Company
William Patient, BFGoodrich Company
Phil Peltz, Georgia Gulf
Dave Peters, Occidental Chemical
Robert Petrich, Rohm and Haas Company
Willem Prinselaar, European Vinyls Corporation
Mike Reynolds, Vista Chemical
John Russ, Borden Chemicals & Plastics
Meredith Scheck, Vinyl Institute
Ervin Schroeder, Shintech
Bill Shoun, Dow Chemical
Carrie Solin, Rohm and Haas Company
Vic Struber, Argus Division of Witco
Brian Wadey, BASF Corporation
Roger Wilson, GE Specialty Chemicals

I. OPENING OF MEETING AND SELF-INTRODUCTIONS

Executive Board Chairman, H.R. Flammer convened the meeting and asked for self-introductions. Mr. Flammer noted that the meeting was scheduled to end at noon, with the Recycling Task Force scheduled to convene at 1:30 p.m.

II. PPFA VIEW ON RECYCLED VINYL IN PIPING APPLICATIONS

Mr. Flammer introduced Mr. Kenneth Stewart, President of Jet Stream Plastics and current President of the Plastic Pipe and Fittings Association, for the purpose of presenting PPFA's views with regard to recovered, recycled PVC in plumbing pipe applications. Background information was included under Tab S of the briefing book for this meeting. Mr. Stewart made a brief presentation on the issue, reviewing discussions held during the recent meeting of the PPFA Product Line Committee. He reviewed existing ASTM and related standards, and asked the VI Executive Board to consider the Institute not publicizing that any recycled material is being used in pipe manufacture.

During the question and answer period that followed his brief presentation, Mr. Stewart noted that the issue is not only a technical one, but a perceptual one. In response to a question from Dr. Gottesman, Mr. Stewart noted that foam core pipe may indeed be an excellent application for the use of recycled material, but that much work needs to be done in the U.S. through the ASTM standards making process. Mr. Stewart noted further that internal plant regrind is currently used in this application and commented that the National Sanitation Foundation carefully monitors adherence to their standard. Dr. Carroll commented that in any presentation being made by the vinyl industry, there should be care in noting that recovered, recycled material can be an excellent choice for the pipe market "when the codes permit" its use. Further, Dr. Carroll commented on the pressure from legislators and regulators on all segments of the plastics industry to recycle material generated from one market back into the same market, i.e., recycled material generated from the packaging market should be used by the packaging market.

Mr. Flammer asked how the VI and PPFA might work together on this issue. Mr. Stewart noted that the PVC Product Line Committee continues to struggle with this issue. He stated that opportunities may exist to get into the high rise construction, which would increase the PVC drain, waste and vent market, but that the size of the market is uncertain. He noted that the PPFA Executive Board has focused on this issue and that it is to be the subject of a January 1990 meeting. Should the opportunity for the VI and PPFA to cooperate in this area develop, Mr. Stewart noted that he would so notify the VI Board. In closing the discussion, Mr. Flammer thanked Mr. Stewart for his presentation and the frank and open discussion that followed.

only when the need for funds in that area became lessened did the Executive Board decide to move into the pro-active programs. He noted that while it may not be a good year for spending dollars, the Board has put itself in the position of having to undo programs that are in process if additional funds are not made available to support the agreed-to initiatives in the solid waste area.

Mr. Patient commented that he believed that strong unanimity was demonstrated at the September 20th Board Meeting on the funding issue, and that he believes the choice for member companies is to either participate in solving the problem or withdraw from the organization. Mr. Prinselaar commented that the industry as a group is paying less than .05% of its worth for all of the Institute's programs.

Mr. Schroeder said that he sees a need to prioritize spending, especially in the case of older programs. Mr. Bush commented that in the fire and combustion toxicity area, the money being spent this year was for the preparation and publication of the technical papers on the research done over several fiscal years at Southwest Research Institute, and further that he believed that in the technical area, programs had been prioritized. Mr. Martinelli commented that he believes that the industry needs to keep ahead of the problems and that spending money in this manner keeps long term expenses lower. Mr. Flammer noted that he believed that a full discussion had taken place and that the Board needed to face the issue of the need for additional revenue. The letter ballot and background documentation of October 12th was be revoted. The ballot was unanimously approved. The VI staff was directed to mail the bills reflecting the additional assessment by Monday, December 18th.

V. SPECIAL PROJECT AND ISSUE UPDATES AND DISCUSSION

A. Solid Waste Management

1. VI Contracts - Sortation

Dr. Gottesman stated that the contract with National Recovery Technologies, Inc. was signed on November 16, 1989. This project is for technical research aimed at developing sortation technology capable of identifying vinyl plastics in a mixed plastic waste stream. A technical task force met with the principals of NRT on November 30th. Dr. Gottesman noted that the contract specifies that the VI has

the right to use and demonstrate the technology for two years.

Dr. Gottesman stated that the Plastics Recycling Foundation formally approved December 4, 1989 a revised sortation program to be undertaken by the Foundation at the Center For Plastics Recycling Research at Rutgers University. He commented that this revised program gives the vinyl portion of the project a higher emphasis.

2. Update on VI Recycling Task Force

Mr. Flammer noted that the task force held an October 19th telephone conference and was scheduled to meet at 1:30 p.m. at the conclusion of the Board Meeting.

3. Legislative Update

Mrs. Scheck noted that updates on state legislation in the solid waste area was included under Tabs K and J of the briefing book for this meeting. The only additional item highlighted was proposed regulations issued by the Connecticut Department of Environmental Protection which establishes definitions of the resins for which identification codes are established. Mr. de la Cruz elaborated on the proposed regulations and noted that they have a less than 10% contaminant standard. He noted that Keller and Heckman has analyzed the proposal and reported on communication with the Council For Solid Waste Solutions, which noted that the definition of "vinyl plastic" is commonly understood to mean a compounded material. Dr. Carroll stated that he recently met with Rep. Mushinsky, who sponsored the law which the regulations are designed to implement, and that she understands and supports the interpretation of the industry.

4. Update on European Recycling Developments Related To PVC and Updates on Country Activities

Mr. Prinselaar noted that except for activity in Austria, there has been no national anti-PVC legislation. He commented that relative to Austria the government is talking about putting legislation through Parliament, but that there needs to be a consensus in the cabinet and that at present, the proposal does not have the support of the Ministry of the Industry.

Prinselaar noted that the plastics industry in Europe has made great strides in addressing the solid waste issues and recently established the Plastics Waste Management Institute. The PWMI is designed to be a body of authority and information, which will work closely with the Waste Management Institute in Japan and the Council For Solid Waste Solutions.

Mr. Prinselaar described in detail activities in Holland that have led to the removal of PVC from retail stores. He noted that the retailers saw the removal as a way to align themselves with the "greens", thus placing their facilities at a competitive advantage. Mrs. Russotto of the APME/ECVM has subsequently met with the retailers and intends to maintain a dialogue.

Mr. Prinselaar reported that the situation in the U.K. is more positive in that PVC is referenced as the "best" material. He credited the long discussions held between the local "green" organization and the British Plastics Federation. In response to a question about the uniformity of the position taken by the various "green" organizations, he noted that with the exception of Greenpeace, most of the other organizations are still in their start-up phase and the opportunity exists for the industry to go on an offensive educational campaign. The most important part of this effort should be to make certain that the PVC industry is positioned as part of the polymer industry.

In response to a question from Dr. Gottesman regarding the position of APME should one segment of the polymer industry be under attack, Mr. Prinselaar noted that with the creation of the PWMI he anticipates significant changes and that APME needs to be strengthened from an administrative and legal perspective. With the activities taking place within the European Economic Community, Mr. Prinselaar stressed the need for positions to be international in nature with individual national organizations implementing the international positions.

Mr. Prinselaar noted that the press release and related information on EVC's joint venture recycling business is included under Tab L of the briefing book for this meeting. He commented that the venture intends to get several companies to take the lead in the signing of acquisition contracts.

Mr. Prinselaar noted that there is a need to link industry market development to the recycling industry, but that a major product development effort is needed. The current thinking is to target the technology developed at Worms at municipalities in the 60,000-80,000 population range.

In response to a question regarding industry unanimity, Mr. Prinselaar noted that he does not feel as though there must be total unanimity, and that even a few companies working together is beneficial.

For example:

- a. Six companies are involved in a project examining the biochemical treatment of waste.
- b. Three German companies have announced the expenditure of \$25 million to set-up plastics recycling centers over the next two years targeted at all polymers, and have established a joint venture on incinerating plastics waste.
- c. EVC has itself targeted \$2-3 million next year in the recycling/solid waste area, with the initial capitalization of Worms at about U.S.\$8 million.

5. Status of Council For Solid Waste Solutions Activity
- Cadmium

Dr. Gottesman noted that the VI Executive Board adopted position statement on cadmium-containing materials in vinyl plastics was forwarded to Don Shea, Executive Vice President of the Council For Solid Waste Solutions. He noted that the CSWS has taken no official action to date. However, there has been significant action elsewhere on the issue of heavy metals in plastics. The Council of Northeast Governors has a proposed draft model state legislation aimed at cadmium, lead and mercury in the packaging market. Occidental Chemical has been charged with the issue for the CSWS. Dr. Carroll further commented that Rep. Lukens has introduced federal legislation aimed at removing heavy metals and that the CSWS is fighting these proposals.

6. Technical Committee Activities

Technical Committee Chairman Chuck Bush updated the Board on the Technical Committee grant program at Vermont Republic Industries and noted that Mr. Al Voegele attended the last Technical Committee meeting. Dr. Bush noted that VRI has an opportunity to set-up a New York State-based program. A subcommittee of the Technical Committee has been established to discuss with VRI the establishment of a post-consumer program.

Dr. Bush reviewed briefly the work done by Recoverable Resources Bronx 2000 (R2B2), and noted that the committee is now attempting to determine what any future VI involvement may be. It was further reported that ASTM is now working on the development of specifications aimed at developing definitions for recycled products and that Mr. Borrelli of Georgia Gulf has been active in this effort. Lastly, Dr. Bush reported the progress made to date on the development of a proposed VI position statement on the issue of lead.

7. Communications Committee Activities

Mr. Reynolds, VI Communications Committee Chairman, stated that the press release on the VI contract with NRT had been mailed December 11, 1989 and distributed copies of the same to the meeting participants. He commented that in conjunction with the staff at Edward Howard and Company, the Communications Committee had discussed ways to maximize coverage of the NRT program and other Institute solid waste initiatives.

Mr. Reynolds referenced the background material included under Tab D of the briefing book for this meeting in commenting on Communications Committee programs planned in conjunction with the 20th Anniversary of Earth Day on April 22nd. He reviewed the type of brochure that the committee intends to produce and estimated that the cost figure is expected to be in the 13-cent range, with the development costs from the committee's budget. It will be a 4-page, three-color report from the vinyl industry. Mr. Reynolds noted that he would be back to the Board with a note asking for orders. He commented that the idea is intended to be supportive of the work being done by the Chemical Manufacturers Association in this area, who have developed the slogan "think globally, act locally".

Although not related to the solid waste area, Mr. Reynolds also distributed to members of the Board advance copies of the new Vinyl Institute brochure "VINYL: Serving More People, In More Products, Made By More Industries, Than Almost Any Other Material Today". Mr. Reynolds was congratulated on his effort in producing this brochure with a round of applause.

Mr. Patient asked whether there was or whether any considerations had been given to the formation of a vinyl industry speakers bureau on the issue of solid waste. Dr. Gottesman commented that at present, there was no such activity, but Mr. Reynolds commented that the committee would consider how to implement such a project. In the past, similar efforts had been undertaken related to fire combustion toxicity issues.

B. Fire and Combustion Toxicity

1. Massachusetts Governor's Commission

Dr. Gottesman noted that there has been no further action on the part of the Governor's Commission since the October 6th meeting at which Dr. Yves Alarie of the University of Pittsburgh testified. Mr. Arthur Cody of the National Fire Protection Association, who is a member of the Commission, has indicated that it is unlikely that any action will take place within the next several weeks.

2. NIBS Update

Dr. Gottesman noted that, as discussed at the last Board Meeting, the test developed by NIBS to measure smoke toxicity performance is believed (by members of the VI Technical Committee) to be seriously flawed. The committee intends to develop a position to take back to NIBS by the end of January.

3. Communications-Related Activity

Mr. Reynolds noted that the Communications Committee discussed at its last meeting the fact that the Institute has done little in the way of contacts with the fire community since the completion of the project with the International Society of Fire Service Instructors in 1983. The Institute's public relations agency had recommended a number of initiatives to reach out and re-establish existing

contacts or make new ones. The committee had decided that prior to expending any public relations monies, that a focus group meeting may be appropriate to assess the existing information base and to try to determine where new information may be needed. Since those discussions, the Electrical Materials Council has determined that there exists a lack of information/misinformation in the electrical market about the fire performance of vinyl electrical applications. Therefore, the two committees have under consideration first doing telephone focus group sessions with construction specifiers/consulting engineers prior to a similar activity in the fire service community.

VI. MEMBERSHIP DEVELOPMENT

A. Report of Membership Committee; Approval of Application of BASF Corporation For Affiliate Membership

Mr. Russ noted that a membership application had been received from BASF Corporation on October 16, 1989 and subsequently reviewed by the membership committee. Mr. Russ noted that background information is included under Tab P of the briefing book. Mr. Shoun moved that the report of the Membership Committee recommending the affiliate membership of BASF Corporation be formally endorsed. The motion was seconded by Mr. Russ and approved on a unanimous voice vote. Mr. Wadey was officially welcomed as his company's representative to the Vinyl Institute.

Mr. Flammer asked for a status report on contacts with other potential members. Dr. Gottesman noted that he had contacts with the FMC Corporation and with Akzo, but that no interest had been expressed by FMC at this time. Mr. Prinselaar and Dr. Gottesman reviewed conversations with principals of Formosa Plastics and Mr. Prinselaar offered to be of any assistance he could.

B. Recommendation From Vinyl Packaging Council Regarding Membership Expansion

Mrs. Solin, in opening her report, noted that she believed the Council's recommendation would be of interest to the Board because its implementation would improve the effectiveness of the pro-active task forces and has the potential of helping the financial base of the Vinyl Institute. Mrs. Solin reviewed the objectives and noted that it would include convertors of sheet and film for packaging only. Mr. de la Cruz, in responding to a question, noted that companies in this category

would be required to be, be definition, members of SPI. Mr. Bailey questioned the narrow focus of the proposal. Mr. Peltz noted that the focus, to date, within the Vinyl Packaging Council, has been on the bottle market. Mr. Flammer stated that perhaps consideration should be given to expanding those eligible for participation in this membership category. Additionally, he commented that this would bring customers into VI Board and committee meetings. Mrs. Solin noted that this has already existed within the VPC, but has not presented any problems. Mr. Avento expressed concern regarding the targeting of funds to markets of concern. Mr. Borrelli noted that there is a need to also balance this need against other segments of the industry of concern. Mr. Peters commented the Uni-Bell PVC Pipe Association is involved in PRO, but that the pipe companies are not eligible for membership, nor have they sought participation.

Following the conclusion of the discussion, Mr. Shoun moved that the changes in the VI bylaws as proposed in the material distributed by Mrs. Solin be revised to incorporate blow molders and that this amendment to the bylaws be approved. The motion was seconded by Mr. Flammer and approved by voice vote without objection. Mr. Flammer requested Mr. de la Cruz to prepare a revised copy of the bylaws.

VII. OTHER

A. Chlorine-Related Trade Associations Meeting

Dr. Gottesman noted that over the past few months, he has had several meetings/discussions with Dr. Robert Smerko, President of The Chlorine Institute. These and other discussions led to the planned January 8, 1990 special meeting as outlined in the material under Tab R of the briefing book for this meeting. Dr. Gottesman noted that at present, he and Mr. Flammer are planning to represent the Vinyl Institute. Dr. Gottesman asked if others are interested in attending that they notify him as soon as possible.

Mr. Prinselaar suggested that since similar issues and activities are developing in Europe that contact be made with Mr. Freiesleben and Mrs. Russotto of the ECVI prior to the January 8th meeting.

B. Trade Issues

Mr. Flammer asked Mr. Reynolds to update the Board on recent trade activities. Mr. Reynolds noted that since

the last meeting, the following events have occurred relative to the Mexican request for a waiver:

- Vista filed a protest with ITC and USTR. Dr. Gottesman noted that he was aware that BFGoodrich, Occidental and Shintech had similarly filed.
- The public report from the ITC is due in the near term. The U.S. Trade Representative will issue a request for comments on the report in early January.
- In late November, the USTR asked for comments on the issue of duty-free imports. (Mr. Reynolds indicated that Vista filed comments.)

Mr. Reynolds stated that the activities he had undertaken to date have convinced him of the need for an ongoing effort focused on trade. Mr. de la Cruz commented on activities appropriate for a trade association to undertake in the trade area.

VIII. FUTURE MEETINGS

A. Next Meeting Date/Location

Dr. Gottesman stated that as specified in the briefing book for this meeting, the next Board meeting is scheduled to be held on Thursday, March 8, 1990 and that a final decision on location needs to be made. Following a brief discussion, the Board decided to meet Thursday, March 15th at an Atlanta location.

B. Annual Meeting

Mr. Flammer noted that it was in order for the Board to make a final decision on the recommendations regarding a location for the Annual Meeting. Background material is included under Tab Q of the briefing book for this meeting. A roundtable discussion followed the announcement that the ANTEC scheduled for early May in Dallas at least partially conflicted with the meeting dates previously selected. The following was decided as a course of action:

1. Ms. Benkner was asked to determine the availability of a suitable Dallas location for May 10-12, 1990.
2. Determine the availability of the previously-recommended sites for May 10-12, 1990.

3. Dr. Gottesman was authorized to make a final decision regarding location and to notify meeting participants.

IX. PRO-ACTIVE TASK FORCES AND MARKET-RELATED ACTIVITIES

A. Pipe Resource Organization (PRO)

1. PRO Program Report

PRO Chairman Dave Peters reported that the organization has met twice since the last Board meeting. In addition to the background report included under Tab H of the briefing book, Mr. Peters noted that the advertising campaign based on product testimonials is nearly completed, with the first ad slated to be in the AWWA Journal in January 1990. He also noted that an excellent working relationship exists with the Uni-Bell PVC Pipe Association, and that the technical support being given by Uni-Bell will continue to make the pro-active work even more effective.

2. California Environmental Impact Report

Dr. Gottesman stated that as detailed in the briefing book for this meeting, hearings on the draft EIR were held September 26th and 27th and October 5th. Dr. Gottesman summarized the issues discussed, including a series of issues raised by the Pipe Trades Council. Dr. Gottesman also summarized the chronological order of events between the close of the comment period and the publication of a final EIR.

Dr. Gottesman stated that should funds be left in the EIR account at the conclusion of the process, he will determine the appropriate rebates due to contributing companies.

B. Electrical Materials Council

In the absence of Council Chairman, Rick Smith, Dr. Gottesman summarized recent Council activity including the range of programs related to participation in the Interwire Trade Show. He noted that as a result of a post-show audit done by the Institute's public relations firm that the Council is now leaning heavily towards non-trade show public relations activity. These items will be discussed at the Council's next meeting, scheduled for January 17, 1990. Additional background information

on the Council's activities was included under Tab G of the briefing book for this meeting.

C. Vinyl Packaging Council

In addition to the report included under Tab F of the briefing book for this meeting, Council Chairman Carrie Solin noted that at the Council's December 12th meeting, the group had discussed participating in Pack Alimentaire with an exhibit aimed at discussing solid waste-related issues. Additionally, the poster being developed by the Council is intended to be self-funded.

X. REGULATORY AND LEGAL UPDATE

A. Health, Safety and Environment Committee

Mr. Borrelli summarized the committee's recent activities as noted in the material included under Tab S, I and J of the briefing book. Mr. Flammer inquired as to whether anyone had asked the committee to consider whether there may be a role for the Vinyl Institute to play in stormwater-related regulatory initiatives under development in Louisiana. Mr. Borrelli indicated that he would ask committee members to address the issue and that a determination would be made as to whether there was a role for the VI to play.

B. Legal Counsel's Report

VI Counsel Peter de la Cruz updated the Board on activities reported on in the material included under Tab J of the briefing book, with specific comments on the comments filed by the Vinyl Institute on EPA's proposed rule to revise the national emission standard for vinyl chloride. Additionally, Mr. de la Cruz noted that a meeting has been tentatively scheduled with representatives of the U.S. Food and Drug Administration on the issue of recycled material in food applications.

XI. ADJOURNMENT

There being no other business, Mr. Russ moved that the Board meeting be adjourned at 12:10 p.m. The motion was seconded by Mrs. Solin and unanimously agreed to.

Respectfully submitted,

Meredith M. Schick