

PIPE RESOURCE ORGANIZATION

Ponte Vedra Inn & Club
200 Ponte Vedra Boulevard
Ponte Vedra Beach, Florida 32082

Thursday
May 28, 1992
8:00 a.m. -- Noon

Attendees:

Mike Barish, Borden Chemicals
Bob Burnett, Vinyl Institute
Roy Gottesman, Vinyl Institute
Frank Conrad, CertainTeed
Sherry Carr, CertainTeed
Peter de la Cruz, Keller & Heckman
Bob Novick, CertainTeed
C.A. Gellner, CertainTeed
Don Pearson, PPG Industries
Sanford Stromberg, Atochem N.A.
Greg Torchiana, Rohm & Haas
E.E. Schroeder, Shintech
Cal Rehfuess, Georgia Gulf
Don Goodman, Occidental Chemical
John Kirkpatrick, Vista Chemical
Fred Sacks, Occidental Chemical
Mary Mahon, Borden Chemicals
George Dillon, Dow Chemical
A.A. Reventas, Shintech
Walt Hermes, Borden Chemicals
Gonzalo Sandino, Petroquimica Colombiana
Dan Stanowick, Edward Howard & Co.
Dave Meeker, Edward Howard & Co.
Bob Walker, Uni-Bell PVC Pipe Assn.

I. SELF INTRODUCTIONS, APPROVAL OF MINUTES, MEETING OBJECTIVES

Chairman Mike Barish opened the meeting at 8:00 a.m. Following self introductions, the minutes of the PRO meeting held on March 17, 1992 were approved as written. Mr. Barish indicated the general objective of the meeting was to review all current and planned projects. To put same into context, he reviewed PRO's original mission statement, a copy of which is attached to these minutes.

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II. BUDGET REVIEW

Bob Burnett reviewed PRO's actual and prorated expenditures for fiscal year 1991-92. He reported a negative budget variance of approximately \$21,000. This was due largely to the success of the group's marketing and communications efforts and greater than anticipated printing and literature fulfillment costs. Mr. Burnett also reported that PRO's approved budget for fiscal year 1992-93 totalled \$147,000.

III. PUBLIC RELATIONS STATUS REPORT

Dan Stanowick gave Edward Howard & Co.'s report of marketing and communications initiatives.

A. Advertising

Mr. Stanowick reported that "Versatility" would be the subject of PRO's next ad in the June issue of AWWA Journal. This would be followed on an every-other-month basis by "Reliability", "Durability", "Economics" and "Water Quality".

Mr. Stanowick reminded the group that although its advertising efforts were not ambitious, they were important in that they countered aggressive efforts by competing pipe interests. On this subject, Roy Gottesman asked Mr. Stanowick to secure and share with PRO examples of same. Bob Walker was asked to secure from the Ductile Iron Pipe Research Association examples of the PVC pipe failures it references in its advertising.

Assignments:

1. Dan Stanowick to secure and share with PRO examples of competing, negative advertising.
2. Bob Walker to secure from the Ductile Iron Pipe Research Association examples of the PVC pipe failures it references in its advertising.

B. Publicity

Mr. Stanowick distributed a copy of a PRO case history article published in a recent issue of Plastics in Building Construction. He reported that an illustrated primer on PVC pipe authored by Bob Walker was scheduled to appear in the July issue of Pipelines and Utilities Construction. He indicated other PRO case history articles were tentatively scheduled to appear soon in Water Engineering & Management, Constructioner and The Florida Specifier.

Mr. Stanowick reported that an illustrated article about PRO's mission and accomplishments was scheduled to appear in the next issue of the Uni-Bell PVC Pipe News, thanks to the interest and efforts of Bob Walker. He reminded the group that National Utility Contractor was still looking for examples of major pipeline rehabilitation projects for its August issue. He reported that Underground Focus is still planning to publish later this year a feature story about reclaimed water systems including examples where PVC pipe was involved. He also reported on a story opportunity with the same magazine examining how excavators can locate buried PVC pipe prior to digging and avoid damaging it.

Assignments:

1. Dan Stanowick to work with Bob Walker to provide Underground Focus with information and examples of how PVC pipe can be protected prior to installation from damage from excavation.

C. Direct Mail

Mr. Stanowick reported that he was proceeding with production of the first issue of PROfile, a periodic newsletter that will be distributed to all those on PRO's inquiry list of municipal water officials, consulting engineers and others. The first issue will be ready for mailing by the middle of June. Copies will also be handed out by Uni-Bell at the AWWA Annual Convention in Vancouver.

Copies of the newsletter will also be sent with a cover letter by Mike Barish to PRO's industry influential list. Additional copies will be sent to all industry trade media with a news release.

For future issues Mr. Stanowick said he would contact PPFA and PPI for news items in addition to his other sources including VI member companies, customer companies, Uni-Bell and industry trade media.

Assignments:

1. Dan Stanowick to draft a cover letter for Mike Barish to accompany a copy of PROfile to be mailed to PRO's industry influential list.
2. Dan Stanowick to draft a news release for a mailing of PROfile to industry trade media.

D. Market Research

Mr. Stanowick reported that he was working with a subcommittee consisting of Bob Burnett, Roy Gottesman, Mike Barish, Bob Novick and Bob Walker to complete a workplan and draft questionnaire to be used to gauge the impact of PRO's marketing and communications efforts. He reported that the final project would involve telephone surveys of approximately 250 municipal water officials, consulting engineers and other industry opinion leaders.

The subcommittee scheduled a telephone conference call to make final decisions about this project at 10 a.m. EST on Tuesday, June 2. Mike Barish asked if other PRO members would be interested in participating in same. Fred Sacks and Greg Torchiana indicated they wanted to receive copies of the workplan and draft questionnaire.

Assignment:

1. Dan Stanowick to send Fred Sacks and Greg Torchiana copies of the market research workplan and draft questionnaire so that they can decide if they are interested in participating in the telephone conference call referenced above.

IV. STATUS OF CALIFORNIA EIR

Roy Gottesman provided a brief update on the status of the ongoing negotiations with the California Department of Housing and Community Development and SRI International to develop a defensible environmental impact report on plastic pipe. He referenced a pending meeting with all interested parties and promised to issue to PRO a written report about same along with a timeline of all significant project developments.

Assignment:

1. Roy Gottesman to issue a written report of a pending meeting with all interested parties in the California EIR along with a project timeline.

V. SOLVENT CEMENT ISSUE

Don Goodman provided an update on the efforts of the South Coast Air Quality Management District to establish and enforce a limit on VOC emissions from solvent cements used to join small diameter PVC pipe.

According to Mr. Goodman, the bad news is that there is still a deadline of 1/1/93 by which time emissions are to be trimmed to 250 grams/ltr. (Most solvent cements currently emit approximately 650-800 grams/ltr.) Other bad news is that the SCAQMD is both very rigid and unpredictable, compounded by the fact that it is also under new management.

The good news, according to Mr. Goodman, is that an extension of the 1/1/93 compliance date will almost certainly be mandated, that the SCAQMD may have other priorities under its new management, that an ad hoc group of both PVC pipe and fitting interests is actively monitoring the situation, that new solvent cements are being formulated with lower volatile organic emission levels and that altogether new pipe joining alternatives are being explored.

Mr. Goodman said that he would continue to follow and report on this situation for the VI.

VI. CODE UPDATE

No new code matters were discussed. In the continuing absence of Peter Lloyd due to health, Mike Barish asked Al Reventas to assume responsibility for monitoring and reporting on relevant code matters at future PRO meetings.

Assignment:

1. Al Reventas to monitor and report on relevant code matters at future PRO meetings.

VII. POLYETHYLENE MONITORING

Also in Peter Lloyd's absence, Mike Barish led a discussion about how new standards were opening up opportunities for medium and high density polyethylene (PE) in markets traditionally dominated by PVC.

Bob Walker referenced plans by the Uni-Bell PVC Pipe Association to evaluate the capabilities and limitations of PE pipe materials in sanitary and storm drain piping. He said the purpose was to delineate the salient differences between PVC and PE beyond readily apparent differences in short-term properties.

In a separate but related matter, Mr. Walker also referenced a 1988 proposal to the Vinyl Institute to conduct a study of the compression strength properties of PVC pipe compounds relative to competing materials including PE, the results of which presumably would enable PVC pipe to aggressively pursue the highway culvert and drainage pipe market. Mr. Walker was asked to review the proposal and was encouraged to submit it to the Vinyl Institute for renewed consideration if he deemed appropriate.

Mike Barish asked Bob Novick, Cal Reh fuss and Al Reventas to serve as members of a special PRO subcommittee on the above and all other matters pertaining to PE. He also asked Dan Stanowick to run a Nexis search of recently published information about PE piping standards and/or applications now and in advance of each regularly scheduled PRO meeting.

Assignments:

1. Bob Walker to evaluate 1988 proposal for a study of PVC pipe's compression strength properties and to submit same to the Vinyl Institute again if he deems appropriate.
2. Bob Novick, Cal Rehfuss and Al Reventas to serve as members of a special PRO subcommittee on all matters relating to PE.
3. Dan Stanowick to run a PE Nexis search now and prior to each PRO meeting.

VIII. UNI-BELL COOPERATIVE PROGRAM

In the interests of time, Bob Walker had submitted a written report of activities and issues of mutual interest between Uni-Bell and the Vinyl Institute prior to PRO's meeting, a copy of which is attached to these minutes.

He indicated that with respect to the AWWA Research Foundation project referenced on Page 3, preliminary results indicate that the problem with PVC pipe most often cited by those interviewed was difficulty in detecting it in the ground. The second most often cited problem was tapping. He observed that although the latter was expected, the former was a surprise. Mr. Walker also indicated that Uni-Bell would continue to carefully monitor and report on this project as it moves forward.

Mr. Walker also reminded the group that Uni-Bell was still anxious to update its brochure entitled, "Vinyl Chloride: The Control of Residual Vinyl Chloride Monomer in PVC Water Pipe", pending updated information from the Vinyl Institute's Health, Safety and Environment Committee. Roy Gottesman indicated he would check on the status of same.

In other business, Mr. Walker indicated he would again be distributing copies of PRO's information kit from Uni-Bell's booth at the AWWA Annual Convention in Vancouver. He also brought to the group's attention a booklet recently published by the U.S. Environmental Protection Agency about the permeation of plastic pipe in severely contaminated soils. He indicated he would soon be meeting with the booklet's author in the U.S. EPA's Region 8 office to share background and supporting science about PVC pipe's permeation properties.

Assignments:

1. Roy Gottesman to check with Meredith Scheck regarding the status of the Health, Safety and Environment Committee's efforts to provide Uni-Bell with updated information for a revision of the brochure entitled, "Vinyl Chloride: The Control of Residual Vinyl Chloride Monomer in PVC Water Pipe".

2. Bob Walker to meet with U.S. EPA relating to PVC pipe permeation properties.

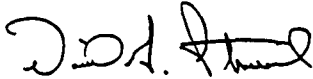
IX. OTHER BUSINESS, REVIEW OF ASSIGNMENTS, NEXT MEETING DATE

There was no other business discussed. Mike Barish then reviewed assignments and the group agreed to hold its next meeting beginning at 8:00 a.m. on Tuesday, September 22, 1992 in the Cleveland offices of Edward Howard & Co. Dan Stanowick offered to distribute hotel information and a map to PRO members prior to the meeting.

X. ADJOURNMENT

There being no further business, the meeting was adjourned at 11:40 a.m.

Respectfully submitted,



Daniel G. Stanowick
Edward Howard & Co.

PIPE RESOURCE ORGANIZATION

MISSION STATEMENT

Proactively promote the use of vinyl in PVC pipe applications, focusing on expansion of the pipe market.

- o Educate the general public, code bodies, legislators and specifiers on the benefits and misconceptions regarding the use of vinyl in pipe applications.
- o Sponsor research and provide a source for information of the safe use, enviromental impact and benefits of the use of vinyl in pipe applications.
- o Identify opportunities to expand the use of vinyl in pipe applications.
- o Develop synergism between the Vinyl Institute and other industry/trade groups in the PVC pipe end use markets.
- o Monitor code and competitive product activities identifying required actions.

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A Division of The Society of The Plastics Industry, Inc.

Robert H. Burnett
Executive Director

May 19, 1992

TO: Pipe Resource Organization

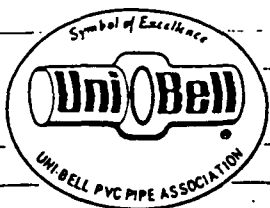
RE: Uni-Bell Activities Report

Attached for your information and comment is Bob Walker's report on activities since our last meeting.

Please review the material and be prepared to discuss the content as necessary at our PRO meeting on May 28th.

RHB/pmb
attachment

CTL029208



UNI-BELL PVC PIPE ASSOCIATION

2655 Villa Creek Drive, Suite 155

Dallas, Texas 75234-7362

Phone (214) 243-3902 Fax (214) 243-3907

May 14, 1992

TO: Bob Burnett
FROM: Bob Walker *[Signature]*
SUBJECT: Uni-Bell Activities Report

Pursuant to conversations we had prior to the last PRO meeting, I have prepared this written report of projects and activities in which Uni-Bell is involved. Distribution of this summary prior to the PRO meeting will conserve meeting time by eliminating my need to verbally report on all these pertinent issues that affect PVC pipe demand.

The PRO meeting will still provide attendees with the opportunity to ask any questions they may have regarding these issues.

Polyethylene Pipe

Uni-Bell Committees and staff have agreed to collect information about PE pipe materials as to their capabilities and limitations for sanitary and storm drain piping. We are seeking to delineate the salient differences between PVC and PE. This investigation will go beyond the readily apparent differences in short-term properties. We will attempt to evaluate the longer term performance potential of various PE compounds.

The motivation to conduct such an investigation is the result of the PE pipe industry's recent attempts to publish an ASTM standard for storm sewers. In addition, we see two divergent opinions with regard to acceptable PE non-pressure pipe compounds emerging from within the PE pipe industry. Chevron and Phillips, with PPI, have challenged the long life integrity of PE materials being used by Advanced Drainage Systems (ADS) and Hancor.

Another, although somewhat lesser, motivating factor was AWWA's approval of a large diameter PE pressure pipe standard.

If our investigations are able to substantiate clear superiority for PVC performance and cost effectiveness, the information can be put to good use to maintain and grow PVC's pipe market share. If all or some PE materials can be used to produce pipes that we find can perform satisfactorily on a long-term basis, and cost less than PVC, we may want to rethink our approach.

The outcome of these investigations will not only have an important effect upon Uni-Bell's stance relative to the pipe marketplace, but could also impact our abilities to work with some PPFA members and Uni-Bell's future scope.

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PRO members are invited to contribute information about PE pipe and PE pipe materials/compounds.

Pivotal City Work, Seminars, Presentations

During the past six months, Uni-Bell has been very active in our specification conversion efforts. Uni-Bell staff have participated in fourteen (14) PVC pipe seminar presentations. These presentations were held in California (4), Illinois, Maryland, Ohio (4), Indiana, Kentucky, Utah and Texas. All total, over 1,000 influentials learned about PVC pipe at these PVC pipe presentations.

We have been following-up an earlier presentation held in Lansing, Michigan. Lansing is poised to allow a subdivision with PVC water pipe this Spring. The iron boys are scrambling to avert Lansing's conversion. Halifax County can now be considered an AWWA C900 PVC pipe user. In addition, Portland, Oregon has, for the first time ever, specified a major PVC pressure pipe project involving both C900 and C905.

Through recent seminar contacts we have begun to work with Indianapolis Water Company to obtain PVC water pipe acceptance. Indianapolis Water installations average over 50 miles of pipe annually.

With regard to large diameter highway culverts and drainage pipe specifications, we have conducted two seminars for Caltrans. We authored a technical design submittal for Pennsylvania's Department of Transportation (DOT), as requested in their consideration for PVC approval. We are working with the DOT's in both Illinois and Indiana to obtain proper PVC pipe approvals. Ohio, Michigan and California DOT's already accept PVC pipes for culverts, but are under pressure from the concrete pipe industry to revise their specifications.

Legislative and Regulatory Issues

In reaction to our initial successes with large diameter sewers, storm sewers and highway culverts, the concrete pipe industry has implemented several counter strategies. One of their approaches is to influence State legislation so as to severely limit or preclude plastic pipe usage for highway drainage and/or storm sewers. Specific examples include: Indiana, where a law would have required highway piping to be non-combustible and New York, where a serious challenge of plastic's durability has been put forth. We have just learned that their New York strategy will be pursued in Michigan as well. The Indiana legislation has been thwarted and a rebuttal has been authored that has at least delayed any action in New York.

Even though they did not prevail in these efforts, they did come very close to success. Consequently, we anticipate a continuing pattern of legislative and political maneuvering. We must monitor these events as best we can, be ready to respond, and work with allied groups to prevent specification approval setbacks.

The American Concrete Pipe Association (ACPA) has also contracted with Bill Nesbeitt to help them with their campaign to deal with plastic pipe. We managed to obtain a copy of the 100 page campaign handbook that Bill prepared. Its contents were discussed at the February Uni-Bell committee meetings. Bill has already conducted several seminars for ACPA and the submittal to New York discussed above appears to be Bill's work.

Uni-Bell has also responded to non-concrete inspired legislative issues in Texas and New Hampshire. The Texas legislation would have restricted PVC sewer pipes by requiring more severe deflection limits and compound limitations. The New Hampshire legislation would have curtailed the use of all PVC water mains less than four inches in diameter. Uni-Bell follow-up is required in both States.

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EPA did not appeal the U.S. Court decision regarding asbestos cement products. Consequently, the proposed 1997 ban of asbestos cement pipe products will not be enforced. Shortly after the February 27th deadline for appeal passed, the Asbestos Information League did conduct a number of seminars throughout the southwestern U.S., attempting to regain some of their lost market share.

We are continuing to monitor the Southcoast Air Quality Management Board's (SCAQMB) efforts to regulate volatile organic carbons (VOC's) emissions. A report was distributed to The Uni-Bell committees during their February meetings.

AWWARF PVC Project

We succeeded in our efforts to involve Al Moser in this project and also succeeded in establishing ourselves on the project's advisory committee. The other participants on the project advisory committee are: Dewey Dickson of JM Montgomery Engineers; Greg Stabler of Davidson Water Company in North Carolina; Bill Axlund of Indian Health Services in Aberdeen, South Dakota; and Pete Mitchell of East Bay Municipal District in Oakland, California.

Two hundred forty five (245) questionnaire were sent to utilities and one hundred sixty four (164) responded. The results provide an invaluable insight into the PVC pressure pipe market. The information is undeniably useful but is not always complimentary.

Phase two of this \$163,000 project is supposed to focus on and investigate any major problems uncovered in phase one. Tapping is expected to be involved in phase two.

I cannot stress enough the importance of monitoring and proper management of this project.

Consensus Standards Work (AWWA, ASTM, AASHTO, NSF, ASCE, 10 States, etc.)

American Water Works Association (AWWA) - There is a great deal of activity at AWWA that will affect PVC pipe sales. We provide you with this abbreviated summary. AWWA has approved and published a new standard for molded PVC pressure fittings 4 in. through 8 in. (AWWA C907). AWWA has also approved and published a newly revised standard for the thickness design of Ductile Iron pipe (AWWA C150). The revisions allow for pressure class ratings for ductile iron instead of the old thickness class numbers. The pressure classes range from 150 psi to 350 psi. Minimum wall thicknesses for each pipe size have also been reduced.

AWWA has also approved and published a new standard for 4 in. through 63 in., PE pipe and fittings (AWWA C906) after overruling objections submitted by Peter Lloyd of BFG and Dave Crowson.

Work is continuing on a proposed PVC pipe installation standard (AWWA C605) and proposed standard for self-tapping PVC saddles. Work also continues on updating the AWWA PVC Pipe Design and Installation Manual (AWWA M23). AWWA has recently issued a survey ballot regarding the color coding of pipes according to end use. Another ballot has been requested to clarify the procedural requirements in AWWA C900 for the pipe flattening test.

Lastly, AWWA has denied authorization for an oriented PVC pressure pipe standard while granting permission to begin work on a new standard for PVC fabricated fittings.

American Society for Testing and Materials (ASTM) - Uni-Bell will co-sponsor and Dave Eckstein is co-chair for the second ASTM plastic pipe symposium. This symposium is planned for 1994 during the last week in February or first week in March, in New Orleans.

A proposed new standard for profile wall PE storm sewers has been narrowly defeated. Work is underway to write a standard for oriented PVC pressure pipe.

In view of abrasion test results with PVC, we plan to work within ASTM to develop a pipe abrasion wear test method.

American Association of State Highway Transportation Officials (AASHTO) - With approval and publication of the newly revised, profile wall, PVC pipe material standard (AASHTO M304), we have been working to incorporate M304 into AASHTO's design specification (Section 18). These changes will help to open up more markets for profile wall PVC highway culverts and storm sewers.

The concrete pipe industry is continually trying to restrict plastic pipe use. They are lobbying hard to limit plastic pipes to a 48 inch maximum diameter. Such limitation has been tacked on to the ballot to revise Section 18 as mentioned in the previous paragraph.

We have also been active in the authoring of a culvert durability document within AASHTO.

National Sanitation Foundation (NSF) - Standard 61 approvals and certification for the PVC generic formulations looks pretty good. All the resins have been cleared along with all lubricants and waxes. The only problem is with some stabilizers. The metal tin and butyl tin stabilizers are acceptable. Work is continuing with antimony stabilizers. Ester stabilizers will be dropped.

For the most part, our objective of a more level certification playing field is being realized. Many states are beginning to mandate Standard 61 certification. The metal people are continuing to seek ways to circumvent the amount of certification scrutiny they face. I recently voted negative on a proposal that would have provided a blanket approval for metal pipe materials.

The mechanical devices manufacturers (i.e., valves, faucets, etc.) are still searching for a protocol that would enable them to comply with Standard 61. They are trying to get EPA to phase their limits in over a period of years to avoid severe "hardship."

American Society of Civil Engineers (ASCE) - We are working with ASCE to update and rewrite their Pressure Pipe Design Manual. We are also monitoring several other projects that could affect PVC pipes' competitiveness.

Ten States Standards - We can report a partial success with this often referenced guideline. It now recognizes "base" inside diameters and the associated tolerances. Without these tolerances, deflection testing becomes overly restrictive. Our committees were given the pertinent pages from the newly published guidelines at their February meetings.

We have yet to convince the 10 States committee that 7.5 percent deflection is the proper test limit (they still require 5 percent), and that flows in PVC pipe can appropriately be calculated using a Mannings "n" of 0.009 (instead of 0.013).

Canadian Standards Association (CSA) - They have approved a PE standard for storm and sanitary sewers. The PE standard parallels the test requirements for PVC sanitary sewers.

CSA has also authored a very nice letter in response to a municipal inquiry about the fire safety of PVC pipes for storm sewers. We provided you with a copy of that letter at your last PRO meeting.

Uni-Bell Literature Report

Uni-Bell typically distributes 1,000 pieces of literature per month (not including Handbooks and Tapping Videos). Based upon past sales and advertising provided on the Vinyl Institute, AWWA Journal ads, we anticipate retail Handbook sales of 50 or more per month.

Tapping video sales have been sluggish but are expected to increase when we publicize its availability in the *Uni-Bell PVC Pipe News*, scheduled for publication in May. Both Spanish and French versions have also been completed and are available.

We have just completed work on a new issue of *Uni-Bell PVC Pipe News*. Fourteen articles are included.

Additional Report Items

Specification Efforts - Uni-Bell has been granted representation on three important committees of the North Texas Council of Governments (NTCOG). They are the Construction Materials Committee, Construction Methods Committee and General Provisions Committee.

At the request of PW Pipe and JM Manufacturing, we will be inputting to the "Orange Book" specifications, which are used in northern Nevada. Our objective will be to remove restrictions on PVC pipe.

Pipe Research Projects - In addition to the AWWARF project dealing with PVC pipe, Uni-Bell is monitoring and has inputted to several other research projects important to you. Dr. Les Gabriel has authored a report on findings and test results of abrasion resistance of profile wall PVC pipe. The information will be extremely beneficial to all of you. Simply put, profile wall PVC outperformed heavy-wall, steel reinforced, concrete pipe.

Scepter and Canon have been closely following work done by the Ontario Ministry of Transportation (MOT). The MOT has evaluated some larger diameter profile wall PVC sewer pipe under shallow burial depths and high surface loadings, i.e., 250 kN or 56,000 pounds. Their recently released, "Summary of Test Results" looks very good.

Ohio University is conducting a study of virtually all profile wall plastic pipes to evaluate their failure modes. In this study, tremendous loads, i.e., in excess of 300 tons, are being applied to shallow burial pipes. We have witnessed some of this testing and successfully requested several test protocol modifications that will better simulate actual in-service conditions. The OU results should have tremendous impact on your highway and storm sewer markets.

The National Science Foundation (NSF) has contracted with Old Dominion University to conduct studies with both PVC and ductile iron pipes relative to earthquake resistance. They will be looking at 4 in. through 12 in., PVC pipe and PVC pipe joints. We are planning to become involved as an expert advisor for PVC pipes.

Pipe Competition - The Water Environment Federation (WEF), formerly Water Pollution Control Federation (WPCF), has a pipe competition each year that is similar to AWWA's tapping contest. The WEF has decided to abandon the use of clay pipe in their competition and begin using only PVC pipe. After consulting with our Uni-Bell Market Development Committee, we have offered our technical support to this effort. Uni-Bell member companies will supply the PVC pipe and PVC saddles to be used in the competition.

The WEF competition will culminate at their Annual Convention in New Orleans, September, 1992.

Uni-Bell Exhibit - Uni-Bell will be exhibiting in Vancouver at this year's AWWA Convention. Please consider our Uni-Bell booth a welcome location on the exhibit floor for you and your people who attend.

Bob, I look forward to seeing you and all members of PRO at your upcoming meeting. I hope this pre-meeting memo is helpful.

RPW/vmw

cc: Uni-Bell Market Development Committee
Uni-Bell Technical Committee
Uni-Bell Associate Members
Uni-Bell International Affiliates
Art Kahn

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