Celebrating MoreThan Sixty Years of Success





47TH ANNUAL MEETING MARCH 11-13, 2019 FAIRMONT GRAND DEL MAR SAN DIEGO, CA

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Sunday, March 10 Monday, March 11 Tuesday, March 12 Wednesday, March 13

17 **BOARD OF DIRECTORS**

18 ATTENDEES BY COMPANY

LIST OF PRESENTERS

DAY ONE Douglas Seargeant Chuck Carr Dr. Lok R. Pokhrel Councilman Sal DiCiccio Councilor Jon Russell Commissioner Libby Szabo

DAY TWO

Staff Reports Robert (Rob) G. Spekreijse Ronald W. Brecher, Ph.D. Bruce Hollands Bill Teichmiller Dr. Neil S. Grigg KEYNOTE SPEAKER: Dr. Sam Clovis, Jr.

DAY THREE

Scott Walter Aiñe Curran SPECIAL GUEST SPEAKER: Jacqueline Milczarek Ryan Benner Nasrin Kashefi Vincent Stone

KNOWLEDGE & NETWORKING

THE LARGEST GATHERING OF PVC PIPE & FITTING MANUFACTURERS IN THE WORLD

Each year Uni-Bell PVC Pipe Association members come together for the Annual Meeting - the largest gathering of PVC pipe and fittings manufacturers in the world. Our guest speakers cover topics ranging from market assessments for PVC pipe, vinyl resin and related chemicals, to sustainability, technology, legislative affairs and product certification. The participants come from around the globe, and their ranks include pipe and fittings manufacturers, resin and additive providers, equipment manufacturers, affiliated associations and non-profit certification agencies.

PRESENTATION TOPICS

- Results of recent testing of PVC water mains after 40 years of service;
- A look at the global thermoplastics marketplace;
- International market developments that are making the PVC pipe and fittings industry stronger;
- Overview of the Trump Administration's policies on trade and the domestic economy;
- Use and performance of PVC pipe in the rural water sector;
- A critical appraisal of the risks and benefits of iron and PVC pipes in drinking water systems;
- Review of the research and data on how water pipelines fail;
- > The truth about environmental activists and how to exploit their weaknesses;
- > PVC pipe's role in pipeline replacement in Las Vegas;
- Why PVC pipe is the green and cost-effective infrastructure option for municipal governments;
- PVC pipe competitiveness in Germany and Italy;
- And much more...

THANK YOU TO OUR SPONSORS

GOLD

SILVER







UNI-BELL'S MAJOR GOALS

MARKET SUPPORT

Identify, analyze and capitalize on opportunities to preserve and expand markets for PVC pipe.

ISSUES MANAGEMENT

Monitor and influence public issues that affect Association members.

TECHNICAL SUPPORT

Collect, interpret and disseminate technical information on industry products and their applications.

EDUCATION

Enhance knowledge and awareness of groups and individuals responsible for the promotion and use of PVC pipe.

STANDARDS AND SPECIFICATIONS

Promote and assist in the development of standards, specifications and practices that encourage proper use of PVC pipe.

ORGANIZATIONAL RELATIONSHIPS

Maintain cooperative relationships and activities with allied organizations in pursuit of Uni-Bell's mission.

INDUSTRY STATISTICS

Lawfully gather, consolidate and disseminate industry sales, marketing and production data.

NETWORKING AND FORUMS

Encourage member interaction and understanding of issues and trends affecting the industry.

ORGANIZATIONAL COMPETENCY

Maintain an organizational structure that reflects the highest levels of volunteer and professional staff competency.





PVC PIPE IN NORTH AMERICA: CELEBRATING MORE THAN SIXTY YEARS OF SUCCESS **ON BEHALF OF UNI-BELL'S BOARD OF DIRECTORS, WE EXTEND A HEARTFELT WELCOME TO ALL PARTICIPANTS IN OUR 47TH ANNUAL MEETING!**

Polyvinyl chloride (PVC) pipes have been used for water and sewer infrastructure in North America for over 60 years because they are cost-effective, immune to corrosion and offer a safe, lowmaintenance lifetime of service. Dig-ups and testing of in-service PVC pipe confirm that its longevity is in excess of 100 years. As well, PVC pipe has the lowest carbon footprint and life cycle costs when compared to other materials.

HISTORY

PVC was discovered in the 1830s but not introduced as pipe in North America until 1951. The first installation of PVC wastewater pipe in North America was in 1952 and the first PVC water distribution pipes were laid in 1955. In 1955 the American Society for Testing and Materials (ASTM) started developing plastic pipe standards. The National Sanitation Foundation (NSF International) began certifying tin-stabilized PVC pipe for drinking water in 1956. Lead as a stabilizer was rejected at the outset by the industry. The 1950s and 1960s were decades of dramatic advances for PVC pipe and fittings technology. During this period PVC pipe began competing with traditional pipe materials in numerous markets.

WATER PIPE

In 1960 ASTM D1785 was published, which is the first standard for PVC pipe in North America. This year marks the 55th anniversary of ASTM D2241 "Standard Specification for Polyvinyl Chloride (PVC) Pressure-Rated Pipe." While not the oldest ASTM PVC pipe standard, it is the most widely used for buried PVC pipe. ASTM D2241 has played a significant role in the growth of rural water systems by providing requirements for materials, dimensions, and product testing that

have ensured users a high-quality pipe product. In addition, D2241 pipe has been used extensively in sewer force main systems. The American Water Works Association (AWWA) published AWWA C900, its first plastic-pipe standard, in 1975. The standard included sizes 4- through 12-inches. At that time, 12-inch PVC water pipe was considered "large-diameter" pipe. The first expansion into larger sizes of PVC pipe for AWWA came with the publication of C905 in 1988. The standard included sizes 14- through 36-inches. The second edition of C905 added 42- and 48-inch sizes. In 2016 the C900 and C905 standards were combined, making C905 redundant. Additional sizes now include 54- and 60-inch and at least one new pressure class was added for each size of pipe. There were many changes over the years, but the most striking is in the definition of large-diameter: the maximum AWWA PVC pipe size is now five times what it was in 1975.

In water systems, PVC has become the product of choice, superseding ductile iron pipe and all other materials. A recent study by Utah State University's Buried Structures Laboratory confirms that PVC water pipe has the lowest overall break rate when compared to cast iron, ductile iron, concrete, steel and asbestos cement pipes. PVC water pipe approval has increased from 60% of water utilities allowing its use in 2012 to 74% allowing its use in 2018 – a 23% increase in acceptance. Some 22% or almost 300,000 miles of North America's municipal water pipelines are now PVC. Rural utilities use PVC water pipe for 95% of their pipe networks and have over one million miles in service. Many rural systems have 3,000 miles of pipe or more — the equivalent of many of our largest municipalities.

SEWER PIPE

ASTM D3034 was the first PVC sewer pipe standard and was introduced in 1972 in sizes 4- through 15-inches. ASTM F679, published in 1980, expanded the size range up to 27 inches. Later revisions increased that maximum size to 48-inch (in 2000) and to 60-inch (in 2014).

Today PVC is the most commonly used wastewater pipe with the longest life cycle over all other sewer pipe materials, including brick, clay, concrete, fiberglass, polymer concrete, polyethylene, cast iron, ductile iron, and steel. PVC's leak free performance and resistance to hydrogen sulfide are key factors for its dominance in gravity sewer and force main markets. It is estimated that 85% of all new sewer pipe installations are PVC, with over one million miles in service.

PVC PIPE'S SUCCESS

The take away message is that PVC pipe's widespread use is not an accident – the pipe is a well-engineered product that continues to provide exceptional service for water and wastewater systems. Join us as we celebrate PVC pipe's more than 60 years of success in the North American water and sewer pipe markets.

With best regards,

John Britton CHAIR Bruce Hollands EXECUTIVE DIRECTOR



OUR MISSION

Our mission is to promote the use of longer-life, lower-maintenance, corrosion-proof PVC piping in water and wastewater systems – for real sustainability, strength and long-term asset management.

INCREASING THE RESPONSIBLE USE OF PVC PIPE

- Expanding demand for PVC pipe products
- Consolidating PVC pipe industry efforts to promote its products
- Informing public opinion on PVC pipe use

○ ○ ● CONFERENCE GUIDELINES

ANTITRUST GUIDELINES

Antitrust laws prohibit agreements or understandings between two or more individuals or businesses to regulate prices or quantities of goods or services, to allocate customers or territories, to hinder or limit a competitor or potential competitor's operations, or otherwise unreasonably restrain business activity. Discriminatory pricing or servicing is also prohibited, as well as monopolization or attempts to monopolize.

Violation of antitrust laws is a felony and convicted individuals can be and have been imprisoned for up to three years. Corporations are subject to heavy fines. Violation of antitrust laws can also lead to civil actions which can result in treble damages and attorneys' fees. Every individual should, therefore, follow these rules:

- DO NOT discuss your prices or competitors' prices with a competitor (except when buying from or selling to that competitor) or anything which might affect prices such as costs, discounts, terms of sale or profit margins.
- DO NOT agree with competitors to uniform terms of sale, warranties or contract provisions.
- > DO NOT agree with competitors to divide customers or territories.
- DO NOT act jointly with one or more competitors to put another competitor at a disadvantage.
- DO NOT try to prevent your supplier from selling to your competitor.
- DO NOT discuss your future pricing, marketing or policy plans with competitors.
- ► DO NOT discuss your customers with your competitors.

WITH RESPECT TO ASSOCIATION ACTIVITIES

- DO NOT make statements regarding prices or matters affecting prices at Association meetings.
- DO NOT make statements about your future plans regarding pricing, expansion or other policies with competitive overtones.
 Do not participate in discussion where other members do.
- DO NOT propose or agree to any standardization which will injure your competitor.
- DO NOT assume you are protected by informal advice from a government official.
- DO consult with the Association's legal counsel before speaking for the Association.
- DO alert Association staff and legal counsel to anything inaccurate or improper. This includes a position the Association has taken or intends to take or a meeting or activity of which you have learned.
- DO consult your own legal counsel or the Association's legal counsel before raising any matter which you feel might be sensitive.
- DO send copies to an Association staff member of any communications or documents sent, received or developed by you when acting for the Association.
- DO alert every employee in your company who deals with the Association of these guidelines.
- DO leave any meeting where any of the foregoing topics are being discussed – and state why you are leaving.
- DO be conservative. If you feel an activity might be improper, do not do it.

PVC Pipe in North America: Celebrating More Than SIXTY YEARS of Success



FEATURE PRESENTATION KEYNOTE SPEAKER

DR. SAM CLOVIS, JR. BUSINESS & POLITICAL CONSULTANT

Former U.S. Fighter Pilot and Inspector General of NORAD and the U.S. Space Command

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OUTLOOK ON THE ECONOMIC AND POLITICAL CLIMATE FOR U.S. MANUFACTURING IN 2019-2020

Dr. Sam Clovis, Jr. will provide an overview of the Trump Administration's policies on trade and the domestic economy as well as the political trends affecting the Administration. Sam served as National Co-Chair and Chief Policy Advisor for the "Trump for President Campaign." He was also a Policy Director during President-Elect Trump's transition period and served as the Senior White House Advisor to the U.S. Department of Agriculture for the Trump Administration. Sam was on active duty as a fighter pilot for the U.S. Air Force for 25 years and retired as a Colonel and Inspector General of the North American Aerospace Defense Command (NORAD) and the U.S. Space Command. Dr. Clovis served as a Fellow at the Homeland Security Institute, contributing to national preparedness and immigration policy. Recently, he was a tenured full Professor of Economics at Morningside College.



FEATURE PRESENTATION SPECIAL GUEST SPEAKER

JACQUELINE MILCZAREK PRESIDENT, NATIONAL CONTENT SOLUTIONS

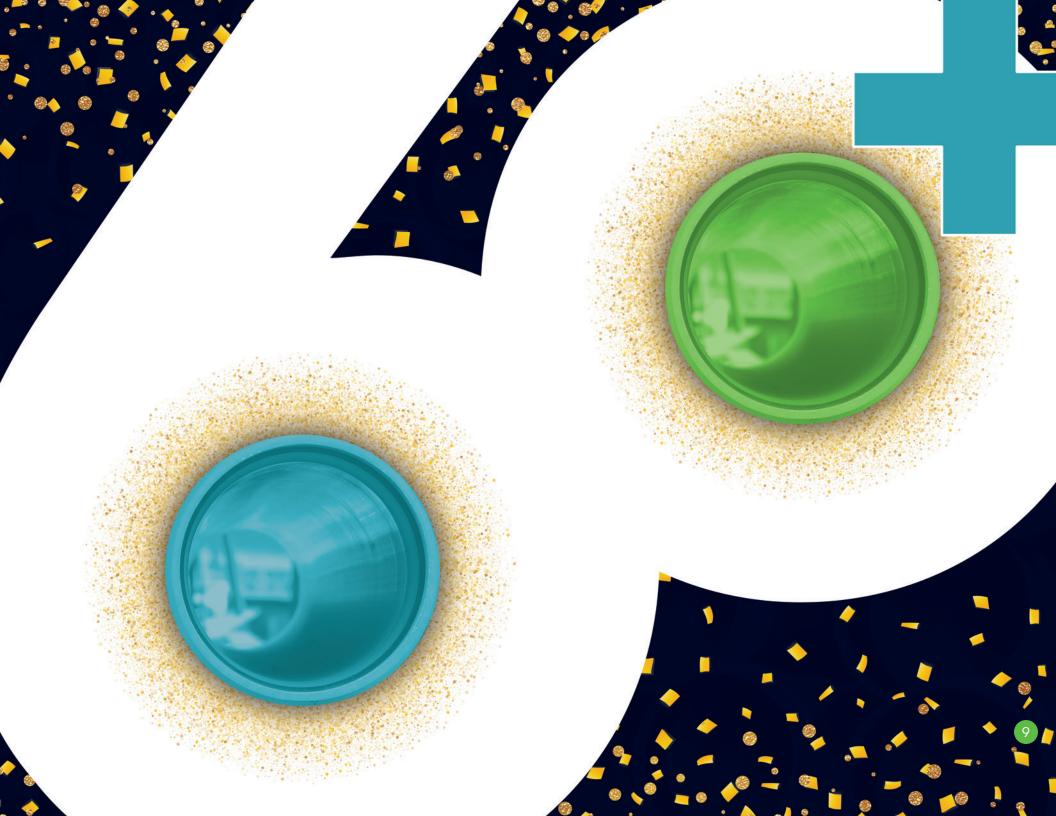
Former National Network News Anchor, Political Journalist and Broadcast Executive

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THE CHALLENGE OF INNOVATION IN GOVERNMENT: HOW PVC PIPE PRODUCERS CAN HELP PROVIDE SOLUTIONS

Jacqueline Milczarek is a former National News Anchor for CTV News, Canada's number one news program, and award winning journalist with more than two decades of broadcast journalism experience. While at CTV Jacqueline set the daily agenda for breaking news across Canada, and she has interviewed everyone from former Prime Ministers to Hollywood celebrities. Milczarek led live breaking news coverage of many pivotal international moments including the 2007 assassingtion of former Pakistani President Benazir Bhutto, the 2007/2008 global financial crisis, the rise of the Arab Spring in 2010 and the Boston Marathon Bombings of 2013. Prior to starting her own content and communications consultancy, Jacqueline was Vice President and Executive Producer at iPoliticsLive, where she helped innovate and grow the organization's ambitious editorial offerings. As President of National Content Solutions, Ms. Milczarek assists clients drive and develop their own authentic digital content and communications strategies. In her presentation Jacqueline will discuss the need for today's governments to invest in innovation and how this correlates to perceptions about job creation and electoral demands related to water conservation, sustainability, public health and safety, etc. Find out why PVC water and sewer pipe is the green and cost-effective infrastructure option for municipal governments.



○ ○ ● SPEAKER BIOGRAPHIES

RYAN BENNER is Asset Management Senior Engineer for the Las Vegas Valley Water District (LVVWD). Mr. Benner has worked for LVVWD for over 10 years and is a licensed professional Mechanical Engineer in the state of Nevada. He is leading LVVWD's condition and performance assessments for its pipeline infrastructure. Ryan has extensive experience conducting pipeline condition assessments and expertise in cathodic protection corrosion control, CCTV internal inspections, and acoustic leak detection.

RONALD W. BRECHER, Ph.D., DABT, C.Chem., is a toxicologist specializing in risk assessment and risk communication related to human exposure to chemicals. Ron consults for health departments and other agencies for all levels of government in Canada as well as private sector clients throughout North America. He has led multi-stakeholder groups in evaluating scientific information to support regulatory decisions and provides training in toxicology, risk assessment, risk communication and children's environmental health. Dr. Brecher also helps companies address misinformation about their products and provides practical tips for engaging customers, responding to negative perceptions, and promoting accurate information sharing.

CHUCK CARR is Global Business Director, Chlor-Alkali/Vinyls at IHS Chemical. Mr. Carr joined IHS Chemical in 2006 as Director of Propylene Studies in the Olefins Group and was most recently Sr. Director, Global Olefins. Chuck spent 21 years at Total Petrochemicals USA working in refinery engineering/ operations, purchasing, plastics logistics, and olefins commercial activities.

AIÑE CURRAN is President and CEO of the Vinyl Council of Canada and has over 20 years of experience in lobbying, media relations and crisis communications, representing firms like Arthur Andersen during the Enron crisis, telecommunications giant Rogers Communications, to global charities in need of revitalized fundraising campaigns. She is also Director, Canadian Council of Sustainable Industries, Director, Coalition of Concerned Manufacturers of Canada, and Past Chair of the Global Vinyl Council. Aiñe began her career as producer/host of a local television program on politics and business. **COUNCILMAN SAL DICICCIO** has represented District 6 on Phoenix City Council since 2009. He has led the fight to cut over \$100 million in government waste, reduce taxes, including eliminating the food tax, and is leading the effort to prevent a looming pension crisis. One of his chief feats has been killing needless regulations and creating a 24-hour model for building permits and inspections, which resulted in the National Federation of Independent Business naming Phoenix in the top five cities to start a new business. He has also received many awards from groups such as the Phoenix Chamber of Commerce for this work. Councilman DiCiccio is a Board Member of the American City County Exchange.

BRUCE HOLLANDS is Executive Director of the PVC Pipe Association. Bruce has worked on underground infrastructure issues with municipalities, water utilities and related state/provincial and federal agencies in North America for more than 20 years. He has extensive experience in association and issues management, public policy, communications, and has consistently advocated for cost-effective solutions for water and sewer systems.

DR. NEIL S. GRIGG is a Professor of Civil and Environmental Engineering at Colorado State University, where he has also been Head of the Department of Civil Engineering and Director of the Colorado Water Resources Research Institute. His recent experience has focused on urban water and utility management, with special emphasis on data management and risk assessment.

NASRIN KASHEFI is General Manager, Plastics Program at NSF International, an organization providing standards development, product certification, education and risk management for public health and safety.

DR. LOK R. POKHREL, Ph.D., MS, MSc is Assistant Professor, Department of Public Health at the Brody School of Medicine as well as the Department of Health, Education and Promotion, College of Health and Human Performance at East Carolina University. Dr. Pokhrel is a trained toxicologist and risk assessor and serves as an expert reviewer for over two dozen international journals. He has directed research on nanotechnology-based products aimed at addressing public health and water quality issues.

○ ○ ● SPEAKER BIOGRAPHIES

COUNCILOR JON RUSSELL (Culpeper, VA) is founder and National Director of the American City County Exchange, a country-wide network of village, town, city and county lawmakers which seeks to advance efficiency, limited government and free market principles at the local level. Jon was a Councilman in Washougal, Washington from 2006-2012 and has been a Councilor in Culpeper, Virginia since 2014, where he has also served two terms as Mayor Pro Tem. He is currently on Culpeper's Personnel and Ordinance Committee, its Economic Development Advisory Committee, and is a member of the Culpeper Chamber of Commerce.

DOUG SEARGEANT is a former Senior Specialist, Distribution and Transmission Infrastructure Group at EPCOR Water Services in Edmonton, Alberta. After graduating in 1978 Doug spent 10 years as a consulting engineer before joining EPCOR. During the past 30 years, Mr. Seargeant has led teams in the utility's engineering and maintenance groups.

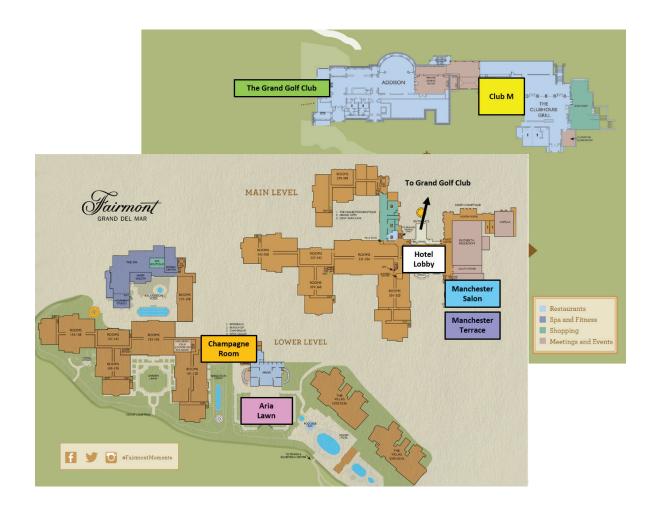
ROBERT (ROB) G. SPEKREIJSE has been CEO of RPflow since 1999 where he is responsible for R&D and marketing. Rob has over 30 years of experience in the plastics industry. Within RPflow, brand names in the USA are Rollepaal for extrusion lines and parts of lines, RBlue for PVC-O lines and Ramix for fitting moulds. RPflow has been in Baltimore, MD since 1989.

VINCENT STONE is Technical & Environmental Affairs Senior Manager for the European Council of Vinyl Manufacturers (ECVM) and VinylPlus. ECVM delivers a broad range of technical, sustainability, advocacy and communication services to the leading European PVC resin manufacturers. Mr. Stone is responsible for the PVC4Pipes platform, which promotes the acceptance and use of PVC pipe through scientific and technical projects, standardization and communication activities. Vincent has worked in the plastics industry for more than 20 years and has a Ph.D. in Plastics Engineering from the Catholic University of Louvain, Belgium and an MBA from Solvay Brussels School of Economics and Management. **COMMISSIONER LIBBY SZABO** (Jefferson County, CO) was elected to three terms in the Colorado General Assembly where she served as House Assistant Minority Leader. In November 2016 she was elected Jefferson County Commissioner, serving as Board Chair in 2016 and 2017, and now as Chair Pro Tem. Libby believes citizens should have an opportunity to live the American dream and that local government's role is to spend efficiently, be accountable and trustworthy, while creating conditions which enable people to own homes and where businesses can thrive. She serves as Chair of the Colorado Counties, Inc. Legislative Committee and the Colorado Women's Alliance. Libby was one of five County Commissioners in the U.S. to attend the White House Infrastructure Summit in 2017. Commissioner Szabo is Chair of the American City County Exchange and was recently appointed to the EPA's Local Government Advisory Committee.

BILL TEICHMILLER is CEO of EJ Water Cooperative, Inc., the largest regional water cooperative system in Illinois, which serves a population of 75,000. It has more than 3,000 miles of pipelines covering over 2,500 square miles, a service area larger than the states of Delaware and Rhode Island. Mr. Teichmiller speaks nationally on leadership strategies, workforce culture, rural community relations and regionalization. Bill also helps EJ Water's customers improve their utility management methods and utilization of leading-edge technologies. He has served two years as President of the Association of Regional Water Organizations.

SCOTT WALTER is President of Capital Research Center, an investigative think tank in Washington, D.C. Scott served in the George W. Bush Administration as Special Assistant to the President for Domestic Policy and was Vice President, Publications and Research at the Philanthropy Roundtable. There he edited *Philanthropy Magazine* and also produced donor guidebooks on public policy research, school choice, and assistance to the poor. Mr. Walter also served as Senior Editor at the American Enterprise Institute and writes regularly for PhilanthropyDaily.com.

OO MAP & PROGRAM AT A GLANCE



NOTE: Attire is business casual/slacks unless specified otherwise. Badges must be worn at all social events and presentations

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*Breakfast is available daily for delegates from 7:00 AM to 8:00 AM in the Manchester Terrace and is included with registration.

SUNDAY 3/10/19

5:30 PM - 6:30 PM @ Club M (located at The Grand Golf Club)

Pre-Meeting Kickoff Reception Sponsored by **RPFLOW**

MONDAY 3/11/19

8:00 AM - 12:00 PM @ Manchester Salon General Meeting Session

9:00 AM - 11:00 AM @ Manchester Terrace Spousal Orientation

12:00 PM - 12:30 PM @ Manchester Salon Meeting of the Associate, International & Certification/Testing Member Committee

5:00 PM – 7:00 PM	@ Manchester Terrace
Welcome & Networking	Reception
Sponsored by NORAC	
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TUESDAY 3/12/19

8:00 AM - 12:00 PM @ Manchester Salon General Meeting Session

1:00 PM - 6:00 PM@ The Grand Golf ClubUni-Bell Golf TournamentSponsored bySponsored by

WEDNESDAY 3/13/19

8:00 AM - 12:00 PM	@ Manchester Salon
General Meeting Session	

12:30 PM - 4:00 PM @ Champagne Room

Board of Directors' Meeting & Luncheon

5:00 PM - 7:00 PM @ Aria Lawn

Closing/Wrap-Up Reception

Sponsored by NAPCO Sasol



PVC Pipe in North America: Celebrating More Than SIXTY YEARS of Success

○ ● SCHEDULE OF EVENTS / PRESENTATIONS MARCH 10 & 11

SUNDAY, MARCH 10

5:30 PM – 6:30 PM @ Club M (located at The Grand Golf Club) **Pre-Meeting Kickoff Reception**

Sponsored by: **RPflow**

• MONDAY, MARCH 11

7:00 AM – 8:00 AM @ Manchester Terrace Breakfast

8:00 AM - 8:35 AM @ Manchester Salon Joint Meeting of Pipe & Resin Producers, Associate, International & Certification/Testina Members

Brad Corbett, Jr., Uni-Bell Board Member, S & B Technical Products, Inc.

Introduction of attendees and new members, new member presentations, and discussion of international travel.

8:35 AM – 8:45 AM @ Manchester Salon Chair's Remarks

John Britton, Uni-Bell Chair, Diamond Plastics Corporation

8:45 AM – 9:15 AM @ Manchester Salon

AWWA C900 PVC Water Main Pipe: 40 Years of Successful Service Douglas Seargeant, P. Eng, Former Senior Specialist, Distribution and Transmission Infrastructure Group, EPCOR Water Services, Inc.

This presentation discusses recent testing of PVC water mains after 40 years of service in Edmonton, Alberta. Includes a comparison with quality control testing undertaken for new PVC pipe in accordance with Standard AWWA C900, as well as testing of rubber gasket material. Mr. Seargeant has previously evaluated PVC water main pipe on multiple occasions at various stages of service life. The information provided is useful to water utilities experiencing maintenance issues with distribution pipelines and seeking to increase their understanding and knowledge of the long-term performance of water pipe materials.

9:15 AM – 10:00 AM @ Manchester Salon PVC: Key Drivers and Trends, Feedstock's Outlook and Worldwide Economic Factors

Chuck Carr, Global Business Director, Chlor-Alkali/Vinyls, Chemical Market Services, IHS Chemical

A look at capacity and demand in the global thermoplastics marketplace, with emphasis on North America.

• MONDAY, MARCH 11 CONTINUED

10:00 AM - 10:30 AM @ Manchester Terrace Break

10:30 AM – 11:00 AM @ Manchester Salon A Critical Appraisal of the Risks and Benefits of Iron and PVC Piping in Drinking Water Systems

Dr. Lok R. Pokhrel, Ph.D., MS, MSc is Assistant Professor, Department of Public Health at the Brody School of Medicine as well as the Department of Health, Education and Promotion, College of Health and Human Performance at East Carolina University

In the U.S. millions are impacted by toxic levels of metals (lead, copper and iron) and pathogenic microorganisms like Escherichia coli and Legionella pneumophila in public drinking water, mainly due to old technology metal pipes. A review of the latest reports and testing in water quality research shows PVC piping to be more durable and safer compared to iron pipes for drinking water supply. How innovations in nanotechnology can improve PVC pipe performance will also be discussed.

11:00 AM - 12:00 PM @ Manchester Salon How the American City County Exchange (ACCE) is Changing the Municipal Landscape Panel Discussion

Councilman Sal DiCiccio, (Phoenix, AZ), ACCE Board Member Councilor Jon Russell, (Culpeper, VA), ACCE National Director Commissioner Libby Szabo, (Jefferson County, CO), ACCE Chair

A panel discussion about ACCE's activities at the local level and how municipalities are embracing free market principles and reforming their procurement practices. Since water and sewer piping represent 60 percent of the total cost of underground infrastructure projects, there is a lot of opportunity for localities to achieve significant savings as the nation prepares to spend \$2 trillion on new pipelines over the next 20 years. Examples of how ACCE is making a difference will be highlighted.

12:00 PM - 12:30 PM @ Manchester Salon Meeting of the Associate, International & Certification/Testing Member Committee

Brad Corbett, Jr., Uni-Bell Board Member/Committee Chair, S & B Technical Products, Inc.

Review of previous minutes and discussion of Committee activities.

○ ○ ● SCHEDULE OF EVENTS / PRESENTATIONS MARCH 11 & 12

MONDAY, MARCH 11 CONTINUED

SOCIAL ACTIVITIES

9:00 AM - 11:00 AM @ Manchester Terrace

Spousal Orientation

Overview of hotel amenities, local activities and surrounding attractions. Includes mimosas, pastries, refreshments and a free spa voucher.

@ Manchester Terrace 5:00 PM - 7:00 PM Welcome & Networking Reception





• TUESDAY, MARCH 12

7:00 AM - 8:00 AM **Breakfast**

@ Manchester Terrace

8:00 AM - 8:45 AM @ Manchester Salon

Executive Director's Report Bruce Hollands, PVC Pipe Association

Regional Engineer Reports

Steve Cooper, Jay Parvez, Richard Nichols, Ethan Lux, PVC Pipe Association

8:45 AM - 9:15 AM @ Manchester Salon

Update on the European Plastic Pipe Market and a Look at International Market Developments for PVC Resin and Pipina

Robert (Rob) G. Spekreijse, CEO of RPflow

Status and outlook on PVC pipe and fittings in Europe and a review of what is happening worldwide, including international market developments that are making the PVC pipe industry stronger. Find out how private sector pipeline ownership and new chip technologies for PVC fittings that indicate flow and other information stand to improve the industry's competitive position. As well, learn how better collaboration around the globe is creating new opportunities.

• TUESDAY, MARCH 12 CONTINUED

9:15 AM - 9:45 AM @ Manchester Salon

Correcting Misinformation About the Safety of Gasketed PVC Pipe

Ronald W. Brecher, Ph.D., DABT, C.Chem., Toxicology and Risk Communication Expert Bruce Hollands, Executive Director, Uni-Bell PVC Pipe Association

Misinformation about the safety of PVC products is everywhere. From comparisons with tobacco to raising fears about cancer-causing chemicals in pipe, some unethical competitors spread misinformation designed to impact economic performance and the perceived safety of PVC pipe in the marketplace. Bruce Hollands will lay out the history of some of these unfounded attacks and will discuss how PVCPA has responded with sound science and effective communication tools, Dr. Ron Brecher will then present a case study on our response to recent misinformation about the safety of organotin stabilizers in gasketed PVC pipe.

9:45 AM - 10:15 AM @ Manchester Salon The Use and Performance of PVC Pipe in Rural Water Systems Bill Teichmiller, CEO of EJ Water Cooperative, Inc. & President of the Association of Regional Water Organizations

A look at rural water utilities in America, which are served by a vast network of small and large diameter water mains, most of which is PVC. Many rural water systems are comprised of thousands of miles of pipe and are comparable in size to the largest municipal utilities. PVC provides a long-life, sustainable pipe product with low break rates and reduced operations and maintenance costs. Includes a discussion of how federal funding has been critical to rural water as well as the importance of regionalization efforts, and how both impact the use of PVC pipe in the rural water sector.

10:15 AM - 10:30 AM @ Manchester Terrace Break

10: 30 AM - 11:00 AM @ Manchester Salon What We Have Learned About How Water Pipelines Fail: A Review of the Research and Data

Dr. Neil S. Grigg, Ph.D., Professor of Civil and Environmental Engineering, **Colorado State University**

After the Safe Drinking Water Act passed in 1974, a flurry of studies uncovered many facts about the causes and mechanisms of pipeline failure. These are available in reports, surveys, data bases and research papers that cover different types of pipes and scenarios of failure. The presentation will summarize the work and point to lessons learned about best practices for pipeline installation and management.

○ ○ ● SCHEDULE OF EVENTS / PRESENTATIONS MARCH 12 & 13

• TUESDAY, MARCH 12 CONTINUED

11:00 AM - 12:00 PM @ Manchester Salon Outlook on the Economic and Political Climate for

U.S. Manufacturing in 2019-2020

Keynote Speaker: Dr. Sam Clovis, Jr., Business and Political Consultant Former U.S. Fighter Pilot and Inspector General of NORAD and the U.S. Space Command

A thought-provoking overview of the Trump Administration's policies on trade and the domestic economy as well as the political trends affecting the Administration. Sam served as National Co-Chair and Chief Policy Advisor for the "Trump for President Campaign." In his presentation, Dr. Clovis will also delve into some of the likely outcomes resulting from a divided Congress, infighting in the Republican Party, and a policy dynamic that is driving the Democrats further to the left and into making ridiculous pronouncements. Parallels will be drawn between the remaking of the Democratic Party in 1972 and the similarities facing the party today as it redefines itself. According to Clovis, we are witnessing the next evolution or manifestation of the Democratic Party, whose ranks now include a large cohort of new adherents to socialist ideas, the culmination of decades of proselytizing by educators. Finally, how public opinion, in the context of very different and competing views for America, will shape the 2020 Presidential election.



SOCIAL ACTIVITIES

1:00 PM - 6:00 PM @The Grand Golf Club

Uni-Bell Golf Tournament

SHOTGUN & SCRAMBLE FORMAT

Lunch available for purchase.



FREE EVENING

• WEDNESDAY, MARCH 13

7:00 AM - 8:00 AM @ Manchester Terrace Breakfast

8:00 AM - 8:30 AM @ Manchester Salon Understanding the Organizations Attacking the PVC Pipe Industry and How to Fight Back

Scott Walter, President, Capital Research Center

Learn the truth about organizations like the Natural Resources Defense Council (NRDC) and other environmental groups. We'll review their strategies and scare tactics, who funds them, and how to exploit their potential weaknesses.

8:30 AM - 9:00 AM @ Manchester Salon Salt of the Earth: Telling the Real Story on Vinyl, One of Mother Nature's Gifts, to Counter Emotional Appeals Used by Activists Aiñe Curran, President, Vinyl Institute of Canada Former Chair, Global Vinyl Council

A discussion of on-going initiatives in the Canadian vinyl industry, including an overview of the current and future political landscape, and how that landscape can potentially affect our global industry. Includes an analysis as to why the vinyl industry must understand that the activist narrative has turned a dramatic corner, and not in our favor. We, as an industry, must get into the game, change our traditional thinking, and dismantle misinformation with the same strategies used to discredit our industry.

9:00 AM - 10:00 AM @ Manchester Salon The Challenge of Innovation in Government: How PVC Pipe Producers Can Help Provide Solutions

Special Guest Speaker: Jacqueline Milczarek, President, National Content Solutions Former National Network News Anchor, Political Journalist and Broadcast Executive Ms. Milczarek helps clients drive and develop their own authentic digital content and communications strategies. In her presentation Jacqueline will discuss the need for today's governments to invest in innovation and how this correlates to perceptions about job creation and electoral demands related to water conservation, sustainability, public health and safety, etc. Find out why PVC water and sewer pipe is the green and cost-effective infrastructure option for municipal governments.

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○ ● SCHEDULE OF EVENTS / PRESENTATIONS MARCH 13

• WEDNESDAY, MARCH 13 CONTINUED

10:00 AM - 10:25 AM @ Manchester Terrace Break

10:25 AM – 10:55 AM @ Manchester Salon The Role of PVC in Pipeline Replacement in Las Vegas Ryan Benner, Asset Management Senior Engineer, Las Vegas Valley Water District (LVVWD)

LVVWD delivers water to 1.4 million residents within the City of Las Vegas and unincorporated Clark County, and maintains more than 4,500 miles of water mains. Its water distribution system experiences less than six percent non-revenue water losses and a break rate of 1.3 breaks/100 miles. The pipeline network primarily consists of PVC (52 percent) and concrete pipe (36 percent); steel and ductile iron comprise much of the remaining pipe material. LVVWD has embarked on a \$600 million dollar, 10-year Capital Improvement Plan (CIP). The CIP program identifies and replaces aging and failing pipelines utilizing a methodology that focuses on field investigations, break history, material type, and other parameters. This presentation will summarize LVVWD's data-based methodology to identify and cost-effectively replace aging pipe with more durable PVC piping.

10:55 AM - 11:25 AM @ Manchester Salon An Update on NSF Standards and Activities for Distribution Pipe

Nasrin Kashefi, General Manager, Plastics Program, NSF International

A presentation on the recent changes to NSF standards and policies related to health effects and performance of distribution pipe, including a short description of the requirements and benefits of certification for PVC pipe.

11:25 AM - 11:55 PM @ Manchester Salon PVC Pipe Competitiveness in Germany and Italy:

A Total Cost of Ownership Approach

Vincent Stone, Technical & Environmental Affairs Senior Manager, European Council of Vinyl Manufacturers / VinylPlus

Review of a new report by Althesys (Milan, Italy) for the European Council of Vinyl Manufacturers which analyzed the competitiveness of PVC pipes in Germany and Italy. The study's objective was to assess the cost savings resulting from the use of PVC pipe compared to the most common alternative pipe materials for various applications, over their entire useful lives. Total Cost of Ownership (TCO) methodology was used to estimate the overall cost paid by local water utilities, taking into consideration total expenditures to purchase, install, maintain, and dispose of the pipes at the end of their service lives. The research confirms that PVC pipe has the best TCO of the pipe materials studied.

• WEDNESDAY, MARCH 13 CONTINUED

11:55 AM – 12:00 PM @ Manchester Salon Closing Remarks John Britton, Uni-Bell Chair, Diamond Plastics Corporation

CONCLUSION OF ANNUAL MEETING PRESENTATIONS

12:30 PM – 4:00 PM @ Champagne Room Board of Directors' Meeting and Luncheon

SOCIAL ACTIVITIES

5:00 PM - 7:00 PM @ Aria Lawn Closing/Wrap-Up Reception Entertainment & Golf Awards Cocktail/Sports Jacket (Tie Optional)

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