

Forums and Workshops

2050-Optimization of Life Cycle Corrosion and Water Costs

Presented by Amir Eliezer, Chair AMPP; Randy Moore, Tnemec Co., Inc & AWWA Vice President; Barb Martin, AWWA Director Eng. & Technical Services; Doug Sherman, Principal-Corrosion Probe, Inc.; Guy Ben Hamu-Shamoon College of Engineering, Israel; James Keegan, Laboratory Service Manager-HDR, Inc.; Mersedeh Akhoondan, Phd, PE-HDR, Inc.; Graig Cillufu Senior Principal; Murray Heywood-Corrosion Probe, Inc. and Brian Cheshire-Tnemec Co., Inc.

This workshop will focus on 2050-optimization of life cycle corrosion control of water infrastructure and sustainability as a cooperative effort between AMPP and AWWA members.

Net zero refers to a state in which the greenhouse gases going into the atmosphere are balanced by removal out of the atmosphere.

The term net zero is important because – for CO₂ at least – this is the state at which global warming stops. The Paris Agreement underlines the need for net zero, requiring states to ‘achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century’.

AWWA Water2050 is an initiative which seeks to establish a long-term vision of the future of water. This collaborative exploration will chart a course for a successful and sustainable water sector. AWWA will engage in a thoughtful, intentional, and inclusive discourse that results in bold, achievable goals.

Ultimately, Water 2050’s influence will extend beyond the water community, fostering partnerships and cross-sector collaboration for mutual and global benefit such as this workshop with AMPP.

Aligned with those long-term visions this workshop will explore the practical application of corrosion control best practices to extend asset service life, lower life-cycle costs and increase asset sustainability. The discussion will use the recently updated AWWA Manual of Practice M27 “External Corrosion Control for Infrastructure Sustainability” as the framework for the workshop discussion. The workshop will include a high-level review of the infrastructure corrosion control content.

- 1) **Workshop Introduction & Overview** (Amir Eliezer, AMPP Vice Chair)
 - Net Zero 2050-Amir Eliezer
 - AWWA Water2050-Randy Moore (AWWA Vice President & Barb Martin (AWWA Director – Engineering/Technical Services
- 2) **Sustainability with Hydrogen – The Route for 2050** (Guy Ben Hamu-SCE)
- 3) **Corrosion Control for Water/Wastewater Infrastructure Sustainability** (Randy Moore-Tnemec)
- 4) **Corrosion Potential in Water/Wastewater Infrastructures** (Mersedeh Akhoondan- HDR)
- 5) **Corrosion Control of Buried Pipelines** (Doug Sherman-Corrosion Probe)
- 6) **Corrosion Control of Water Storage Tanks** (Brian Cheshire-Tnemec)
- 7) **Special Atmospheric Corrosion in Water/Wastewater Infrastructure** (Murray Heywood-Corrosion Probe)
- 8) **Corrosion of Steel Reinforced Concrete Structures** (James Keegan-HDR)
- 9) **Water & Wastewater Infrastructures in view of AMPP Sustainability Initiatives** (Craig Cillufu-Apex Corrosion)
- 10) **Panel Q&A** (All Presenters)

Advance Your Career with AMPP

Presented by Alicia Yust, Federico Romano, Keenan Loubser, Melanie Diaz, AMPP; Phil Fouche, Quatro-Rex Co; Kenneth Seal, IUPAT; and Tom Conner, Peoples Gas

AMPP This session is targeted at those who have previously participated or are looking to participate in an AMPP certification or education programs. We will have a panel of industry professionals who will share what it takes to be successful in an AMPP courses/certification exams and how it's impacted their careers. We will have an interactive career mapping tool that you can use to determine what's next in your journey. This session will give you a preview of upcoming courses and certifications, discuss opportunities to get involved in teaching and/or developing the next generation of course materials and certifications.

Beyond The Standard: Leadership Behaviors that Drive Results

Co-chaired by Stephanie Corey Xcel Energy; Kailey Dharam, Dairyland; and Kelsey May, MESA

As leaders we want committed employees, happy customers, and thriving communities, but how do we connect the dots between our own leadership behaviors and these outcomes? That's the question we will answer in an interactive, multi-generational forum that will leave you better equipped to drive results across diverse teams as you enhance the experience of your employees, customers, and communities. Together we will explore what becomes possible when we look and lead beyond the standard.

Uncommon Leadership for Uncommon Times

Presented by Bob Chalker, CEO of AMPP

Bob will share the leadership challenges of merging two organizations with very different cultures, while contending with the Covid pandemic, and when companies were feeling new pressure to stake positions in an increasingly polarized society. Focusing on principles of mutual listening and respect, Bob already had transformed AMPP's employee culture in a way that raised the bar for the entire organization, when: revenue went away overnight; an entirely new product/service delivery system had to be developed overnight; NACE/SSPC merger talks were going forward; employees essentially voted to become primarily remote workers; COVID, social and historic political unrest created ongoing anxiety for many employees; in-person interaction between employees decreased significantly, impacting how teams build trust and familiarity. So much fear and turmoil. In this Zoom world, Bob will share great insight on how leaders keep moving forward.

Leadership and Lyrics

Presented by Clay Brelsford and Jarret Brelsford, Bass Engineering

Customer service is a defining factor in an organization's success. But with ever-evolving requirements and expectations, it can be hard to adapt. Join us as we explore Bass Engineering's approach to customer relationships through the lens of a multi-generational leadership team. We'll talk about how the workforce has changed from one generation to another, and how we can hum the tune of servant-focused leadership every day.

Businesses have Neighbors: Social Responsibility with a Multi-Level Impact

Presented by Mike Tachick and Kailey Dharam, Dairyland

Social responsibility can too often feel distant, complicated, or impersonal rather than a vibrant part of our company cultures. In this session, we will discuss how to facilitate meaningful community engagement to impact your employees,

company, community members, and even larger societal challenges. To support practical application, we will use Dairyland's partnership with Habitat for Humanity as a case study.

Self-Awareness and Self-Management: Foundations of Emotion Intelligence

Presented by Trispective Group

In this session, we lay the groundwork for interpersonal and leadership effectiveness by starting with the most essential aspects of EQ: self-awareness and self-management. Using Goleman's EQ framework, we look at how our hard-wiring can work against us in high-impact, high-emotion situations and we share proven methods for self-management in moments when it matters most. We build on current research and high-profile examples and allow participants to explore their own triggers and apply learnings to their own challenges. Finally, we allow for sharing of personal best practices in small groups.

Leadership Lunch: Diversity, Equity, and Inclusion: More than the Right Thing to Do

Presented by Tracy Spears, Founder of the Exceptional Leaders Lab

Explore and discuss why diverse teams perform better, uncover personal and institutional biases, and leave with an action plan for building a truly diverse and inclusive organization.

Tracy Spears is a Certified Speaking Professional and the Founder of the Exceptional Leaders Lab. She specializes in developing leaders, inspiring teamwork, and enhancing inter-office communications. The innovative content in her keynote speeches and workshops is taken directly from her best-selling books, "What Exceptional Leaders Know" and "The Exceptional Leaders Playbook". Her energetic and interactive approach has helped leaders and aspiring leaders all over the world improve their leadership skills, their communication, and their understanding of how people and organizations succeed.

Tracy is a graduate of the University of Oklahoma and an accomplished athlete who was a member of the U.S. National Softball Team. Tracy is a member of the National Speakers Association and is one of the highest rated leadership, diversity & inclusion, and team development coaches.

Coatings 101 Workshop

Presented by Charles Brown, Chris Farschon and Mike Baase, GPI

Workshop - Coatings 101 is a workshop for those individuals who want to get a basic understanding of a typical protective coatings project, from understanding the need for a project to the unique challenges faced in the industrial coatings industry.

Coating Failure Investigations - Finding the Cause

Presented by Valerie Sherbondy and Rick Huntley, KTA-Tator, Inc.

It is not supposed to happen, but sometimes coatings fail long before expected. Coating materials are designed to work in many environments and for many years. When the expected service life falls short of expectations there is plenty of discussion, blame and finger-pointing. There are general causes that can be used as global possibilities for the failure, but there are also details from the field investigation and laboratory tests that can assist in identifying the main factors that contributed to the coating failure. This presentation will build on the common generalities that get the blame for coating failures and build on those to more closely examine the failure and plan the investigation process. Several actual

coating failures will be referenced as case studies to follow the investigative process from sample collection, project fact finding, and laboratory testing, to discover what caused the failure. In addition, possible ways to remedy the situation and avoid the situation in the future will be discussed.

College of Fire Knowledge

Presented by William Dempster, Akzonobel; and Cabot Wilkinson, Carboline

Passive fire protection (PFP) materials have been in existence for hundreds of years protecting structures, assets, and lives. Over that same time frame, materials evolved into the modern systems of today providing not only fire but also corrosion, cryogenic and chemical spill protection to the underlying substrate in a multitude of environmental conditions. Yet, passive fire protection is a misunderstood science and viewed as a necessary evil in the construction industry. The College of Fire Knowledge is designed to provide useable, practical knowledge to industry professionals in 4 segments.

- Commercial PFP 101
- Hydrocarbon PFP 102
- Commercial PFP Materials 102
- Hydrocarbon PFP Materials 102

Topics covered will be specific to each industry and provide information such as fire scenarios, environmental exposures, type certificates and PFP materials. Guest lecturers will be experienced fire protection professionals.

Contractor Forum on OSHA Blood Lead Level Rule

OSHA (the Occupational Safety and Health Administration) and AMPP members play a critical role in ensuring safe and healthful working conditions for America's workforce. Join policymakers and industry experts for a discussion on how OSHA is considering updates to the Lead standards for general industry (applicable also to maritime) and construction. The forum will provide both a regulator and industry perspective on best practices and the latest developments. This forum is your chance to hear directly from OSHA. Additionally, you'll have the opportunity to hear from fellow members and stakeholders on the latest trends in workforce strategy.

Corrosion and Green Energy

Presented by Jon H. Brasher, Ovante, LLC and Graig Cilluffo, Cornerstone Corrosion Consulting

Sources of sustainable energy generation, transmission, distribution and storage are not immune to damage from corrosion. This workshop will provide a forum for presentation of corrosion problems, solutions, and mitigation strategies.

Corrosion Control in Solar PV Structures

Presented by Angel Kowalski and Jason Land, DNV

Solar photovoltaic (PV) installations require support structures to secure the panels to the ground. Steel piles are typically used as support structures. The section buried in the ground is exposed to soil corrosion. Corrosion of underground structures can be very complex. Soil and the water introduced into the soil contains various products, salts, acids and alkalis, mixtures of organic substances, oxidizing or reducing fungi, bacteria, etc. Depending on the composition, it has different degrees of permeability to air and moisture. Normally, the oxygen content is less than in

the air, while the carbon dioxide content is higher. However, the concentration of oxygen varies from the surface along the piling depth. Oxygen concentration cells form between the oxygen rich and lean areas near the surface (soil-to-air interface) with corrosion occurring at the latter. The corrosion rate of the structure located at the soil-to-air interface could be significantly higher than the corrosion rate of the buried structure located away from it (deeper). Variations in soil properties can be great between different locations, even those very near each other. Soils can change from highly corrosive in some regions to moderately corrosive or low in others. Soils such as clay, peat bog and humus are typically highly corrosive, while sand and gravel are moderately corrosive depending on the moisture/salt content. The corrosivity of an area is increased further if a structure is exposed to areas of differing corrosivity. In addition to the above soil differences, structural piles electrically connected to each other and to electrical ground could be exposed to higher corrosion rates compared to the corrosion rate of individual piles buried in similar soils. Proper material selection and design of adequate corrosion control systems are key elements to consider when installing PV systems. Sample cases are presented to discuss some of the corrosion control challenges faced in the Solar PV installations.

Corrosion Mitigation and Preservation Efforts on United States Coast Guard Cutters

Presented by Ross Markham, US Coast Guard - USCGC TAHOMA; Nick Paisker, US Coast Guard; and Dr. Ram Bhagat, U.S. Coast Guard Surface Forces Logistics Center

An informational dive into how the US Coast Guard maintains its fleet of aging and new vessel classes, exploring maintenance/inspection planning techniques, guiding organizational/industrial references and unique geographical/operational driving factors.

Developing Strategies and Processes for Successful Corrosion Control Through Protective Coatings

Presented by D. Terry Greenfield & Matt Mills – CONSULEX

This workshop will explore the corrosion control challenges faced by amusement parks and similar assets. Successful strategies include long term vision in the selection of materials and their installation for the most effective asset protection, customer safety, and economic benefit. Attendees should expect to gain valuable insight and information that they can return with and leverage successfully to provide benefit to their operations and assets. Coatings asset management, corrosion control methodologies, materials selection, work management, quality control & assurance, and the processes to integrate all into a holistic corrosion management approach will be explored to the benefit of the attendees.

EAPA Seminar

Presented by Bei Gu, AMPP

With staggering and increasing corrosion losses globally, stronger, smarter yet more sustainable technologies are being needed for corrosion mitigation and control. For instance, smart materials have received wide interests for the development of next-generation surfaces and coatings capable of sensing corrosion and healing damages with minimal human intervention. On another front, intelligent machine learning approaches begin to demonstrate their power to better diagnose complex corrosion problems and more efficiently design corrosion-resistant materials. Following the successes last two years, EAPA seminar at CORROSION conference will continue to focus on the topics relevant to Intelligent Corrosion Control, including smart materials for corrosion protection, sensors and devices for corrosion monitoring and inspection, and corrosion modelling and prediction.

Insulation Selection and Managing Corrosion Under Insulation

Presented by Michael Pardo, S&B Engineers and David Hunter, Hempel USA

One definition of sustainability is “the avoidance of the depletion of natural resources in order to maintain an ecological balance”. Reducing energy consumption and therefore, by definition, the natural resources to produce the energy, is not only good environmental practice but also good business practice.

This forum will discuss the engineering selection of insulation systems, their performance and corrosion under insulation considerations.

Integrated External Corrosion Management

Presented by Keith Parker and Marc Rouleau, Enbridge Liquid Pipeline; Trey Johnston, Corpro; Christophe Baete, Elsyca; Len Krissa and Paul Murray, Enbridge GTM; and Tom Hayden, EDI

Incorporating Modeling and Machine Learning in a Corrosion Management Program.

Major Refurbishment of a Century Old Miter Gate: Opening the Path to the Regional Ship-Repair Industry Awakening

Presented by Juan Caballero and Jeimy Bernal, Naval & Industrial Solutions

This presentation is intended to share all the experiences gained during surface preparation and paint application jobs and how this iconic project has a high impact towards raising the quality in ship repair industry.

Non-Metallics: A Solution Towards a Sustainable Future

- To present the cost-efficiency of non-metallics compared to conventional materials
- To showcase the benefits of sustainable non-metallic materials in addressing environmental challenges, namely carbon emissions, and prompting recyclability efforts
- To highlight the advantages of non-metallics in construction due to their durability and resistance to corrosion, and their longer life cycle
- To increase awareness of the advantages of non-metallics to be considered in the design outcome and uplift local and regional content
- To accelerate technological developments in the area of operations through R&D efforts to support S&R adoption for non-metallics
- To overcome limitations of non-metallic standards through opening the channel for discussions

OSHA's 1910.134 Respiratory Protection Standard

Presented by Charles Brown, GPI

Workshop - Understanding OSHA's requirements for an Effective respiratory protection program.

PHMSA Pipeline Safety Forum

Chaired by: Kevin Garrity, MEARS

Presented by: Alan Mayberry, PHMSA; Bill Caram, Pipeline Safety Trust; and Debbie Franco, South Jersey Gas

PHMSA (Pipeline and Hazardous Materials Safety Administration) and AMPP members play a critical role in protecting the public from potential catastrophic failures of liquid/gas pipelines. Join policymakers, regulators, and industry experts for a discussion on how PHMSA and other agencies address corrosion in pipeline safety. The forum will provide both a regulator and industry perspective on best pipeline safety practices and the latest developments. The PHMSA Forum is your chance to hear an annual update from key PHMSA officials and discuss proposed rules that may be considered in 2023. Additionally, you'll have the opportunity to hear from fellow members and stakeholders on the latest trends in pipeline safety.

Project Applications and Benefits of Galvanizing, Metallizing, and other Zinc Coatings to Protect Steel Structures

Presented by Bernardo Duran, International Zinc Association; and Featuring Various Presenters

Presentations will cover the advantages of galvanizing, metallizing, and liquid zinc coatings as steel corrosion protection measures, as described by the experiences of DOTs and other specifiers. The presenters will also discuss project applications and describe the different application methods that can be used when specifying and inspecting zinc coatings.

Proper Use of Coatings Inspection Instruments Workshop

Presented by Bill Corbett and Lake Barrett, KTA-Tator Inc.

Ideally suited for those interested in learning the basics of instrument use and for those pursuing AMPP Coating Inspector Certification, this basic workshop is modeled after the successful Coatings Inspection Instrument Use Workshop conducted at many SSPC Coatings+ conferences, and at AMPP 2022. The workshop introduces participants to the primary inspection instruments and visual guides used on a typical coatings project. It features a hands-on lab composed of 10 stations where participants work in teams and use the gages and visual guides on sample substrates.

State of the Art: Marine Scrubbers

Presented by Bud Ross, Nickel Institute

Four informal presentations on marine scrubber corrosion as a part of the committee (team members) meeting on the new AMPP Standard SP21541. The standard provides information about the materials used in the handling discharge washwater piping from marine exhaust gas cleaning systems (EGCS or scrubbers), and the welding procedures needed for optimum corrosion resistance.

STI/SPFA Field Erected Steel Water Storage Tank Seminar

Presented by Tim O'Toole, Steel Tank Institute/Steel Plate Fabricators Association; Fred Ruinen, Fisher Tank Company; Brad Veath, CB&I; Chip Stein, Tank Industry Consultants; Kevin Gallagher, Caldwell Tanks; Randy Moore and Brian Cheshire, Tnemec; and Katie Duda, Seal for Life

The STI/SPFA Field Erected Steel Water Storage Tank Seminar for consulting engineers, municipality and utility administrators, and water storage tank owners and operators, has been completely updated, featuring new, important topics and content.

Topics covered include:

- Review of Aboveground Potable Water Tank Styles

- Site Location Selection
- Overview of Related AWWA Standards and Manuals of Practice
- Tank Design, Construction, and Inspection
- Coating Systems Selection and Inspection
- Overcoat vs. Removal and Replacement of Coating Systems
- Maintenance and Asset Management Programs to Optimize Life-Cycle Cost

This four-hour seminar will feature specific case studies and examples highlighting the application of all applicable AWWA Standards and Manuals of Practice relating to potable steel water storage tank design, construction, maintenance, and asset management. Attendees will have opportunities to ask questions of the experienced and knowledgeable subject matter experts throughout the program and during a panel discussion.

Thermal and Cold Spray Processes and Applications in Corrosion Mitigation

Presented by Shiladitya Paul, TWI; and James Weber, James K. Weber Consulting LLC

This session will cover interactive discussions on thermal and cold spray coatings for mitigation of corrosion and wear with a specific focus on (but not limited to) surface preparation, coating consumable selection, spray method selection, spray parameter development, in-line quality and inspection, testing and qualification, operational experience, cost reduction, maintenance and repair. The subjects to be covered include latest research and field experience on thermal spray coatings, materials, processes and strategies for corrosion control, etc. The group will also discuss conventional and novel thermal and cold spray coating systems used to prevent corrosion and wear in offshore, onshore, oil and gas, subsea, marine, construction, chemical industry, refinery, construction, automotive, power, aerospace, etc. The open-forum format would allow fruitful exchange of ideas which would otherwise not be possible in a traditional Symposium.

Understanding the Role of Insulation in Corrosion: It Can Make or Break You

Moderator: Ron King – National Insulation Association Past President, Industry Consultant/SM

A total system approach, including updated specifications and proper design, installation of materials, and maintenance of the insulation system, is essential in the fight against corrosion under insulation (CUI). During this presentation you will learn about reducing the potential for CUI while reducing energy costs and carbon emissions, the impact of temperature cycling and the increased risk for CUI, how moisture getting into an insulation system, or moisture staying in an insulation system increases the risk of CUI and if the type of insulation/system makes a difference.

What's New with QP Accreditation?

Presented by Dave Evans and AMPP Accreditation Staff

Learn what's new with the QP Accreditation Programs. We will share our goals and updates to the merit program, the Disciplinary Action Criteria, Applications, Standards and much more. We will also discuss our focus on business development and how you can be involved in the program and provide feedback for enhancements in QP's future.

Why Do Coatings & Linings Systems Fail Prematurely? How to Investigate Premature Failures When They Occur

Presented by Mike O'Brien, MARK 10 Resource Group, Inc.

Premature coating failures continue to cost asset owners, paint manufacturers, fabricators, contractors, shipbuilders and others substantial amounts of unbudgeted money every year. Most failures are preventable if the proper principles are employed for selecting, applying and inspecting the coatings. This tutorial is based on hundreds of real-life coating failures investigated by the presenter during his 42 years in the coating industry. This practical, informative and lively tutorial is presented using many real-life case histories. It addresses coating failures that occur on steel, concrete, hot-dip galvanizing, and ductile iron substrates and explains the important properties for each of these substrates to consider when selecting and applying coatings to them. Failures involving most of the commonly applied coatings, including but not limited to, inorganic zinc, organic zinc, epoxy, epoxy intumescent fireproofing, polysiloxane, polyurethane, water-based acrylic and polyurea are discussed with pictures of the actual failures shown. When a premature coating failure occurs, it is important to know how to investigate it using proper principles, techniques and procedures. During the presentation this year, the tutorial will include a section on some basic principles to employ when investigating a premature coating failure, including how to prepare for a coating failure investigation, how to conduct the onsite investigation, how to determine the laboratory testing to perform, and how to analyze the results, and write the report.

AMMPiTheater

Advances in Environmental Corrosion Monitoring for Industrial Controls and Data Centers

Presented by, Igal Brodetsky, PhD., Cosasco

Environmental corrosion is becoming an issue as more and more servers and industrial controls are coming online. The presence of corrosive gasses in the atmosphere can slowly degrade the electrical connections in these systems, causing sudden and unpredictable system failures. Environmental corrosion monitoring can detect the presence of these corrosive agents and predict potential failures in data centers and industrial control servers. This presentation will discuss the current state of the art in environmental monitoring systems.

Alternative CRA Solutions for Clad Line Pipe

Presented by Christian Begle, voestalpine Grobblech GmbH

The use of roll bonded clad plates for line pipe is usually limited to a few CRA materials. Typical austenitic CRA materials (e.g. 316L) for lower corrosion properties and nickel-based alloys (e.g. Alloy 625 or 825) for higher requirements. The gap between these CRA materials in corrosion behavior is quite large and not really used for line pipe applications. For example the two CRA materials N08904 and S31254 have proven to be suitable solutions from a technical point of view. Additionally, by improving the rolling and measuring processes, a reduction of the CRA thickness, especially for nickel-based alloys, is possible at the final product and could be a beneficial option for future projects.

Coatings Inspectors: Easy Eddie, Tough Tony, and Wise Wally

Presented by Michael A. Harkin, FeO, Inc

Correctly identifying, and managing, your coating inspector has a major impact on the success, or failure, of your coatings project. This presentation will be an in-depth discussion based on my article in the May 2021 edition of Coatings Pro titled "Coatings Inspectors: Easy Eddie, Tough Tony, and Wise Wally". We will discuss recognizing the 3 general types of coating inspector, their different strengths and weaknesses, and (most importantly) how to handle them in a productive way.

CoatingsPro's 2023 Contractor Awards Program Presentation

Presented by Stephanie Chizik, CoatingsPro Magazine

Presentation of the 2023 award winners

Internal Corrosion Management Program

Presented by David Velasco, Cosasco

Roundtable discussion on leading and lagging indicators of internal corrosion, available technologies, and corresponding benefits/drawbacks.

Powder Coatings and the Future of Coatings

Presented by Tom Higginbotham, PPG

Robotic Solutions for Corrosion Under Insulation (CUI) Inspections

Presented by Quinn Holub, Gecko Robotics

Corrosion under insulation (CUI) is corrosion that occurs in the base metal of storage tanks, pressure vessels, and other assets when moisture penetrates the outer insulation. Corrosion and damage to the insulation are difficult to detect without the costly process of removing insulation and performing a manual inspection. However, with recent developments in robotics-based NDT techniques, internal inspections reveal CUI without the need for expensive scaffolding or removing insulation. Through high-definition, color-coded corrosion maps, owner/operators can pinpoint CUI in the base metal and make data-driven asset maintenance and insulation repair decisions.

Rope Access and Integrated Services (RAIS): Alternative Access Solutions

Chairs: Andy Shingledecker and Jason Caruso, Acuren Inspection, Inc.

The chairs will discuss the integrated capabilities and limitations of RAIS and the abilities and limitations of RAIS for mechanical services and inspections. Safety and man hour exposure and RAIS vs. traditional scaffolding will also be covered. The audience will have the opportunity to ask questions.

Two-Coat Systems with Three Coat Performance

Presenter: David Fernee, Sherwin Williams

Two-Coat systems with three coat performance a review of applications, specifications and cost savings.

Navigating the QP Accreditation Process, A Step-by-Step Guide for Coatings Contractors

Presenter: Dave Evans, AMPP

Dave Evans and AMPP QP Staff | In this workshop we discuss strategies to gain access to better jobs and projects, adding efficiency of your organization, increase your revenue, and reduce rework through improved processes and efficiencies required to achieve AMPP QP Accreditation. We will map out the process from start to finish including QP Program

selection, application and required document submittals, audit checklists, onsite audit and beyond. Let's get your organization ready to achieve one or more AMPP QP Accreditations.

Ultrasonic Inspection for Corrosion Inspection

Presented by Jorge T. Reyna, JRSA Inspections

Presentation objectives as follows:

- 1) Explain What is the physical phenomena of Ultrasonic testing Method
- 2) Explain some techniques derived from Ultrasonic testing as a Nondestructive Testing Method
- 3) Show how to use different types of conventional and advanced UT inspection systems