Wednesday, October 16, 2019

7:30am – 8:30am  Registration and Continental Breakfast
8:30am – 8:50am  Welcome: Opening Remarks

2019 Conference Co-Chairs: Earl Crochet, Director of Engineering, Kinder Morgan, Dave Cushman, General Manager, West Virginia Paint, LLC

8:50am – 9:30am  Keynote Session –TBD
Moderator: Morris Kline, Caldwell Tanks
Keynote Description Available Soon
Speaker: TBD

9:30am – 9:50am  Morning Refreshment Break 1

9:50am – 10:30am  Session 1 Title: A Better Mousetrap? A Potential New Application and Innovation to Prevent Overfills
Moderator: Marilyn Shores, Shores Consulting
We have been investigating applying some existing technology in an innovated way to help prevent tank overfills. This presentation will focus on the technology and some real world testing we have performed at Kinder Morgan.
Speaker: Earl Crochet, Kinder Morgan

10:30am – 10:50am  Morning Refreshment Break 2

10:50am – 12:00pm  Session 2A Title: Fitness for Service Assessment of AST Post-Fire Incident
Moderator: Rama Challa, Matrix Service Company
This presentation conveys an approach and a methodology for performing fitness for service for continued operation of storage tanks when they have been subjected to a fire incident. The presentation would provide steps that need to be considered as part of the fitness for service evaluation. The presentation provides methods to evaluate the extent of damage. The approach generally considers both the API 579 guidelines for assessment of Fire Damage and provide recommendations for post event repairs to put the tank back in service.
Speaker: Golnaz Bassiri, Matrix PDM Engineering

Session 2B Title: Tank Design with Fire in Mind
Moderator: Mark Howard, US EPA
Presentation will provide considerations for design of storage tanks to maintain safe operation. Will concentrate on components and systems design related to fire prevention, suppression and considerations to ensure tank integrity.
Speaker: Art Szaradzinski, Bechtel
12:00pm – 1:10pm  Lunch –  Sponsorship Available

1:10pm – 1:55pm  Session 3 Title: Storage Tank Financial Responsibility: How do I Comply?
Moderator: Dan Fleck, Kinder Morgan

This session will cover the options of how owners and operators can demonstrate financial responsibility. What are the most commonly used financial assurance mechanisms and what are the required coverage amounts. Discussion of additional compliance mechanisms available to local governments.

Speaker: David Lau, Allied World Insurance Company

1:55pm – 2:10pm  Afternoon Refreshment Break 1

2:10pm – 3:20pm  Session 4A Title: Revising the Design of API 650 Wind Loading Provisions
Moderator: Larry Foster, Marathon Petroleum Company

Designing for storm level wind is complex and tricky, not to mention the constantly changing requirements of ASCE 7. In this talk we shown now only how to compute wind loading on tanks, but what these results mean for the next edition of API 650. This talk will be of interest to designers, engineers, and owners who want to understand how to build tanks to withstand storm winds.

Speaker: Phil Myers, PEMY Consulting, LLC

Session 4B Title: Stainless Steel Tank Bottoms Providing Both Cost and Corrosion Control

Moderator: Wayne Geyer, STI/SPFA

Stainless steel grades which are suitable for tank bottoms that can be used to reduce corrosion effects for both soil corrosion and stored chemicals will be presented. Fabrication considerations especially those for the dissimilar metal joint will be discussed. Cost/benefit estimates to show that these stainless solutions (using API 650 design requirements) are not ‘out of line’ compared with conventional tanks with double bottoms, liners and the extra things required for the traditional approach.

Speaker: John Grocki, Advantage Resources Consulting

3:20pm – 3:35pm  Afternoon Refreshment Break 2

3:35pm – 5:00pm  Session 5A Title: SSPC-SP1 Disconnect Between Standard and Results
Moderator: Dennis Spicer, Energy Transfer

What is the cause for a rising number of premature lining failures? Could it be that the non-compliance of the SSPC-SP1 Solvent Cleaning standard is a large contributing factor? Bob Pate thinks so and will discuss his findings behind the issue.

Speaker: Bob Pate, Denso North America

Session 5B Title: How API 652 Guidance has Continuing Relevance in a Changing Market

Moderator: Brian Hattori, Bechtel

API 652 (Lining of Aboveground Petroleum Storage Tank Bottoms) continues to be relevant in the selection of high performance linings. This presentation is intended to review the history of these protective linings, identifying how some of these have offered long service life - we will then show how these attributes can be built into the next generation of linings ensuring continued performance as demands change.
Speaker: Michael Harrison, Sherwin Williams

**Session 5C Title: Trending Toward Thicker Linings – Is it a Good Trend?**

**Moderator:** Mike Brockway, TCI Services, LLC

The protective coating technology has been trending toward thicker linings with unintended consequences for owner operators of petroleum storage tanks. This 30 minute presentation will review some of the challenges that owner operators are facing with their API 653 out of service inspections, both from a technical perspective and certainly from an increased and unanticipated cost perspective.

**Speaker:** David Cushman, West Virginia Paint, LLC

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**Thursday, October 17, 2019**

7:30am – 8:30am **Registration and Continental Breakfast**

8:30am – 8:45am **Welcome: Opening Remarks**

8:45am – 9:30am **Keynote Session – Culture and Process Safety**

**Moderator:** Earl Crochet, Kinder Morgan

The impact of safety culture, including concepts such as normalization of deviance will be examined using past investigation data. Suggestions on moving forward will be discussed, aimed at the Agency’s mission of chemical industry safety improvement.

**Speaker:** Manny Ehrlich, US Chemical Safety Board

9:30am – 9:50am **Morning Refreshment Break 1**

9:50am – 10:30am **Session 1 Title: Tank Bottoms Resuspension Model**

**Moderator:** Andrew Yearwood, PEMY Consulting

Tank bottoms accumulate in tanks over many years of service. The bottoms can range from 1~2 ft to over 12 ft. These bottoms impact operational safety, as well as reduce the tank capacity. The best method of bottoms management and removal is through mixing. Computational Fluid Dynamics is used to gather data on mixing performance in resuspending tank bottoms and verified against results in the field to gain confidence in the model.

**Speaker:** Shaun Leo, Enbridge Pipelines

10:30am – 10:50am **Morning Refreshment Break 2**

10:50am – 12:00pm **Session 2A Title: How an Innovative Management System can be a Catalyst for Success in a Prescriptive Regulatory Environment**

**Moderator:** George Morovich, Tank and Environmental Technologies, Inc.

Sustainability in the oil and gas industry requires lean, innovative and transparent operations. Leaders in industry are seeking a solution that merges compliance and maintenance in a system that:

- Verifies and standardizes the process
- Is easy to use, meeting compliance by design
- Leverages data to advance operations
This short presentation compares two tank owners. See how they are positioning operations to face challenges and seize opportunities in an increasingly digital environment.

**Speaker:** Beth Brueckner, G.K. Hills Consulting

**Session 2B Title:** How Far Do We Have to Go to Determine What Regulations and Standards Apply to my Aboveground Tanks?

**Moderator:** Mark Howard, US EPA

What regulations and standards apply to your aboveground storage tanks? Where do you go to find out? How do you determine their applicability and how do you satisfy local codes and standards? In this presentation, we will provide an outline to follow to assist you making sure that you have at least thought of everything.

**Speaker:** Joyce Rizzo, JD2 Environmental

**Session 2C Title:** A Dynamic Look at Design of Upstream Storage Tanks

**Moderator:** Ron Santelik, Howard Energy Partners

There has been a recent focus on proper design of upstream storage tank control systems by EPA and state air quality regulators. Typical design practices for vapor control systems for these types of tanks may result in under-design. This presentation will go over the tools and best practices to properly design and size these types of systems.

**Speaker:** James Van Horne, SLR International Corporation

12:00pm – 1:10pm

**Lunch** – **Sponsorship Available**

1:10pm – 1:55pm

**Session 3 Title:** Corrosion & Pitting Phenomenon Observed in Newly Built Storage Tanks

**Moderator:** Mark Jordan, McDermott

Isolated cases of corrosion and pitting on storage tank bottom plates during construction proliferated to something worse with the discovery of holes in a tank bottom. MFL and UT scanning on tank bottoms confirmed a severe of the situation with many tanks having some indications of advanced soil side corrosion. Material preservation, construction sequencing, coating application, and environmental awareness are among the casual factors. Operational risks with CP performance, MIC presence, and settlement are discussed.

**Speaker:** Michel Mottern, Saudi Aramco

1:55pm – 2:10pm

**Afternoon Refreshment Break 1**

2:10pm – 3:20pm

**Session 4A Title:** The Importance of Developing a Plan for Inspection of All Your Storage Tanks

**Moderator:** Nelson Acosta, HMT Inspection

Companies need to develop an inspection schedule for their own unique storage tanks, and not just tanks with regulated substances. Possible factors: tank size & throughput; characteristics of the material being stored; tank age, materials of construction; storage & maintenance history; criticality (e.g., what if the worst case occurs and the tank can’t be used any more, with possible damage to adjacent tanks & equipment?). Case studies will be used to illustrate what can happen.

**Speaker:** Richard Rosera and Stuart Vawter, EHS GRADES International

**Session 4B Title:** The Five Pillars: Essential Elements for Successfully Managing Your Tank Turnaround Program

**Moderator:** Peter Williams, Concord Tank Corporation
A successful tank turnaround management program requires a formalized, repeatable, reliable, consistent, and sustainable process to meet or exceed schedule, cost, and quality goals. Those involved in the planning, execution, or management of tank turnaround programs will discover how the application of proper project management principles, consistent process implementation, and the commitment to developing 'best-in-class' turnaround team behaviors, ensures solid, and continuously improving, program performance.

**Speaker:** Patrick Stanton, RLG International

**3:20pm – 3:35pm**  
**Afternoon Refreshment Break 2**

**3:35pm – 4:50pm**  
**Session 5A Title:** Update on Content and Completion of New NACE Standard for External Corrosion Control of AST Bottoms

**Moderator:** Amy Baxter, Enbridge Energy Company

*In February 2016 NACE approved the development of a new comprehensive AST Standard entitled “Standard for External Corrosion Control of On-Grade Carbon Steel Storage Tank Bottoms”. Task Group (TG) 543 was created to write the Standard and enlisted the assistance of an international collection of AST corrosion control professionals. The Vice Chairman of TG 543 will present an overview of this comprehensive Standard and its content, along with a progress update plus corresponding timeline targets for completion.*

**Speaker:** Tim Whited, MESA

**Session 5B Title:** Finite Element Analysis Success and Pitfalls in Tank Applications

**Moderator:** Matt VanAlsburg, Advance Tank and Construction

*Finite Element Analysis (FEA) is one of the most useful and misused engineering tools of the modern era. This presentation will focus exclusively on the challenges and pitfalls when using FEA to solve tank problems and how to use it successfully. The presentation will present case studies on key topics covering common tank FEA problems including tank settlement, nozzle loads, hydrotest exemptions, wind buckling, and painter hitch loadings.*

**Speaker:** Andrew Yearwood, PEMY Consulting

**5:00pm – 6:00pm**  
**Closing Reception – Sponsorship Available**