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Date	Location
Tuesday, May 9th, 2023	Zio Fraedo's Restaurant 611 Gregory Lane, Pleasant Hill, CA. (925) 933-9091

Time: No Host Bar 5:30 pm • Dinner 6:30 pm • Program 7:15 pm

Cost: \$10 AMPP members/non-members, and General Public

Please RSVP immediately by the Eventbrite. Cancellation deadline is Friday May 5th 2023

Visit the Section Website at www.ampp-norcal.org

If you need additional information, please send the email to <u>AMPPNORCAL@OUTLOOK.COM</u>

TOPIC: Examination of Beneficial Surface Contaminants on

Carbon Steel from Select Blast Media

SPEAKER: Andrew Recker

Vice President of R&D Protective and Marine Division

The Sherwin-Williams Company

ABSTRACT:

- Recent lab studies have shown that different blast media will embed some of the media composition into the surface of the carbon steel substrate. The composition of the contaminants has been examined with x-ray analysis and determined to be persistent after any standard removal process such as compressed air blow down or broom type bristle sweeping. Also, protective coatings were applied to the contaminated surfaces to provide performance data in high temperature immersion service. The results show some correlation with positive impact and some showed correlation with negative impact on the performance. Certain blast media that have high levels of the positive contaminants have been identified and are further examined for their extent of contaminant transfer.
- This study focuses on the positive impact of certain contaminants such as Mg and Al to confirm the benefit and determine the mechanism of the increase in performance of the coatings over various levels of these contaminants. The outcome of this study provides the recommendation of the optimal blast media composition for the highest performance of the applied coatings / linings. Contaminant-free carbon steel and negative controls in Ca and Na contaminated steel that have been established are utilized for comparison.

BIOGRAPHY:

• Andrew has worked in research and development for several companies over the past 20 years in various markets. His experience ranges from pressure sensitive adhesive development for a tier one automotive supplier to protective coatings for high value steel structures. He has spent much time researching the corrosion process and methods of protection from barrier type to passivation. Through his development work, he has produced novel ideas for patent applications still pending. His immediate interests are new product management and development of possible cross-over technologies as applied to the anti-corrosion market.