2016 Update for AASHTO TSP2 NBPP Coatings Group Activities

JEFF POULIOTTE, P.E., FDOT STATE STRUCTURES MAINTENANCE ENGINEER
CHAIR, NBPP COATINGS GROUP
NBPP Coatings Group History & Evolution

Presentation of “FDOT New Directions in Steel Corrosion Protection” at 2012 SEBPP Annual Meeting

SEBPP Coatings Group (2012 thru 2014)
- A Rational Approach for Planning Bridge Repainting Projects Report
- Report Calculator
- SEBPP Survey of Best Practices for Coating Structural Steel

NBPP Coating Group (2014)
NBPP Coatings Group Goals & Activities

Group Activities over the last year

Short Term Goals
- Better quality workmanship
- Longer lasting Coatings

Long Term Goals
- Implementation of High Performance Coating Systems
- Long term maintenance cost reductions

Game Plan moving forward
AASHTO Domestic Scan 15-03 Team Update

Domestic Scan “Bridge Recoating Best Practices” (began October 2015)

- Find out which States have the best recoating programs and why
- Determine best Specifications
- Determine best Coating Systems
- Determine best Practices

NBPP Coatings Group, SCOM, NTPEP, T-9 and T-18 participation on the Scan Team and/or in the Domestic Scan

Results should help owners improve their coating programs, and help to guide future activities for the NBPP Coatings Group
AASHTO Domestic Scan Team Update

Scan Team met 4 times since November 2015: 3 teleconferences and 1 face to face meeting in Washington DC in December 2015

Scan Team developed Questions and an Agenda for the Peer Exchange

The Peer Exchange took place in Orlando on May 23 thru 26, 2016

The Scan Report should be completed by October 2016

Seven Agencies composed the Scan Team: Maryland, Iowa, Oregon, Texas, and Florida DOT’s, FHWA, and Kentucky Transportation Research Center
## AASHTO Domestic Scan Team Update

### The Following Agencies Participated in the Domestic Scan in Orlando:
- FHWA
- Florida DOT
- Golden Gate Bridge District
- Iowa DOT
- Maryland State Highway Administration
- Michigan DOT
- NASA
- Oregon DOT
- Texas DOT
- Virginia DOT
- Washington State DOT

### The Following Agencies Participated in the Domestic Scan Remotely:
- Caltrans
- Kentucky Transportation Research Center
- New York State DOT
- Ohio DOT
- Pennsylvania DOT
NASA’s Corrosion Laboratory and Beach Exposure Site
AASHTO Domestic Scan Team Initial Findings

A week long discussion identified a number of areas of opportunity:

- Single coat of Inorganic zinc where aesthetics are not a concern
- Fluoropolymers
- Polyurethane Clear Coat
- Galvanizing, Metalizing and Duplex Coatings
- Ultra high pressure wash (> 10,000 psi) for removal of pack rust
- Laser coating removal reduces time, disposal and risk (personnel and environment)
- Eliminate deck joints wherever possible
- Warranties
Global Issues with regard to coatings:
- Engineering Evaluations
- Surface Preparation
- Coating Application
- Contractor, CEI and Owner Qualifications
- Hold Points for critical Inspection Operations
- Specifications
- Better Coating Systems for new construction and recoating projects
- Institutional Courage
- Challenge the Low Bid Culture
NBPP Coatings Group Pursuits

Develop Plan to help Owners achieve better results:

◦ Convince Owners of the benefits for improving Coating Practices:
  I. Improved Coating System Service Life
  II. Preservation of Structural Steel Elements
  III. Improved Infrastructure Service Life
  IV. Reduced Maintenance Costs
  V. Reduced User Costs

◦ Promote the development of improved Specifications
◦ Promote universal Training for Inspectors and Contractors (NACE or SSPC)
NBPP Coatings Group Activities

Duplex Coating Systems (Galvanizing or Metalizing with Top Coat)
- Promote Research to Study Improved Durability of Steel Bridge Structures through Effective Use of Duplex Coating Systems
- Track implementation and success of Projects using Duplex Coating Systems
- Participate with NSBA in the development of Metalizing Specification

Increased Participation and Liaison with other Groups
- AASHTO Subcommittees (Bridges and Structures, Maintenance, Materials and Construction), NTPEP and TRB
- Increased Participation and Liaison with Industry Groups (NSBA, SSPC, NACE, Consultants, Suppliers and Contractors?)

Promote development and implementation of High Performance Coating Systems
Promote development of Improved Specifications
Group Challenges and Strategic Plan

Determine Direction of Group moving forward

Increase Industry participation

Find a way to involve the Contracting Community

Revise Strategic Plan as needed:

- Vision
- Mission
- Goals
- Strategic Objectives
- Work Plan and Actions
NBPP Coatings Group Team

- Jeff Pouliotte, Florida DOT, Chair
- Wayne Senick, Termarust Technologies, Vice Chair
- Regis Doucette, CHLOR RId, Secretary
- Atiq Alvi, T. Y. Lin
- J. Peter Ault, Elzly Technology Corporation
- Mark Barnes, Washington DOT
- Joe Berish, Society for Protective Coatings (SSPC)
- Charlie Brown, Maryland SHA
- Derrick Castle, Sherwin Williams
- Jeff Carlson, American Institute of Steel Construction
- J. Winn Darden, AGC Glass Company
- Steve Duke, Florida DOT
- Wayne Fleming, Virginia DOT
- Ted Hopwood, Kentucky Transportation Center
- Brian Hunter, North Carolina DOT
- Mark Hudson, Sherwin Williams
- Kevin Irving, AZZ Galvanizing Services
- Bruce V. Johnson, Oregon DOT
- Jim Kunkle, Society for Protective Coatings (SSPC)
- Stewart Linz, Arkansas DOT
- Bobby Meade, Kentucky Transportation Center
- Farokh Mehr, DowAksa
- Jeff Milton, Virginia DOT
- Ronald Mondor, Termarust Technologies
- Dan Muller, North Carolina DOT
- Shannon Pole, International ZINC Association
- Kevin Pruski, Texas DOT
- Thomas A Stephens, Baton Rouge Dept. of Public Works
- Justin Thompson, Georgia DOT
- Paul Vinik, Florida DOT
- Ed Welch, TSP-2
- Davoud Zamani, DowAksa
- Jonathan Fischer, Florida DOT
Isaiah D. Hart Bridge, Jacksonville, Florida
Through Truss with Suspended Deck, 1088 Foot Span Over the St. Johns River, Green Aliphatic Polyurethane
Questions?

Jeff Pouliotte
Florida Department of Transportation
(850) 410-5691
Jeffrey.Pouliotte@dot.state.fl.us