

CALIFORNIA FORUM ON TRENCHLESS TECHNOLOGY

City of Los Angeles Public Works Building, 1149 S. Broadway St, Los Angeles, CA 90015

Tuesday, November 17, 2009

AGENDA

Joint Session with Invited Industry Participants

- 8:30 Coffee and reception
- 9:00 Welcome and introductions
- 9:15 Technical presentations/field demonstrations
- 9:15 - 9:45 **Simplifying Wastewater Management with Automated Robotic Inspection ...** Eric Close,
RedZone Robotics
- 9:45 - 10:15 **Coatings and Linings for Underground Structures...** Rocky Capehart, *Sprayroq*
- 10:15 - 10:45 **Manhole Rehabilitation Decision-Repair or Replace ...** Peter van Arkens, *Environmental Coatings/Sewer Shield Composites*
- 10:45 – 11:00 BREAK
- 11:00- 11:30 **“AXIS” Guided Boring ...** Jason DeWitt and Ryan Erger, *Vermeer Pacific*
- 11:30 – 12:00 **Polyurea Spray-On Coatings for Stormwater Sewers ...** Donald A. Dancey, *Innovative Painting & Waterproofing Inc*
- 12:00 – 12:15 **UV-Cured CIPP Sectional Repair ...** Chris Scaratt, *Cosmic Tophat LLC*
- 12:15-1:00 LUNCH

Field Demos

- 1:00-1:30 (1) CIPP Cosmic UV Quick Seal
(2) Polyurea spray-on system
(3) RedZone Robotics (tentative)

Municipal Participants only Session

- 1:30 Discussion and information sharing
- 3:00 Adjourn

PRESENTATION SUMMARIES

Coatings and Linings for Underground Structures

By Rocky Capehart, *Sprayroq*

Coatings and linings used in wastewater, potable water, gas and industrial facilities for infiltration/inflow control, corrosion protection and structural enhancement will be discussed. Recommendations will be given on how to select the right systems and to match problems with solutions. Different products options will be discussed for corrosion protection, infiltration/inflow control & structural renewal. Public agencies (e.g., City and County of LA, City of Houston), Trenchless Technology Center, ASTM, and NACE have reviewed & tested many available coating systems for structural capabilities and corrosion resistance. Some underground coating installation variables include ambient & time related conditions, facility accessibility, certified equipment for quality installation & required coating thickness for service requirements & longevity. The presentation will demonstrate that successful coating installations typically focus on surface preparation for proper adhesion of the material resulting in a monolithic or pin-hole free installation. Some recommended installation objectives are included, i.e. proven & tested products & equipment, quality assurance & quality control during construction, qualified contractors, specific inspection parameter, trained inspectors and third party testing.

Manhole Rehabilitation Decision-Repair or Replace?

By Peter van Arkens, *Environmental Coatings/Sewer Shield Composites*

The Sewer Shield repair process for manhole rehabilitation will be presented. The process has been used successfully for over 28 years. Composite manhole inserts made of Sewer Shield 100 epoxy resins build free-standing manholes, designed and engineered to replace/rehab deteriorated manholes due to corrosion. Inserts vary in length as needed, providing maximum flexibility.

Simplifying Wastewater Management with Automated Robotic Inspection

By Eric Close, *RedZone Robotics*

Collection system managers are under pressure to make critical decisions about abundant, valuable, buried infrastructure while dealing with serious constraints. Common constraints are insufficient time, insufficient funding, insufficient resources and insufficient technologies. This presentation will systematically explore the fundamental patterns of collection system management and opportunities to leverage robotic technology to overcome these key constraints and achieve operational objectives such as shortening key business cycles, reducing CSO's, SSO's and regulatory compliance

“AXIS” Guided Boring

By Jason DeWitt and Ryan Erger, *Vermeer Pacific*

A guided boring system for pit-launched trenchless pipe installation designed to achieve pinpoint, on-grade accuracy will be presented. The system utilizes a vacuum excavation system to help eliminate some of the difficult steps associated with other installation techniques. A wide range of product pipe, sizing specifications, and other jobsite requirements can be met with the versatile capabilities of this system.

Polyurea Spray-On Coatings for Stormwater Sewers

By Donald Dancey, *Innovative Painting & Waterproofing Inc*

Polyurea is a rapid cure elastomer with a typical gel time of 7-10 seconds that can be placed in service within 10 minutes. Polyurea technology has been used over the last 20 years as a protective membrane for concrete, steel, wood and fiberglass substrates but is relatively new to the pipeline rehabilitation. Recent advancements in Polyurea technology combined with development of robotics application equipment have made these systems ideal for pipeline repair and preventative maintenance. This presentation shows the technology when used for rehabilitation of stormwater sewers.

UV-Cured CIPP Sectional Repair

By Chris Scaratt, *Cosmic Tophat LLC*

A mainline UV-cured CIPP sectional (spot) repair system applicable in pipes from 6" to 24" in diameter will be presented. The liner is 4 ft long and made of glass-fiber composite laminate, which cures in 7 minutes.