



NASTT'S CURED-IN-PLACE PIPE GOOD PRACTICES COURSE

Wednesday, November 9, 2011

Cary, North Carolina

Cary Holiday Inn Hotel & Suites

Sponsored by:



Tri-State Utilities Co.

www.tristateutilities.com

**An in-depth overview of CIPP
from planning and design to job
completion:**

- **Construction & Installation**
- **Application Range**
- **Testing**
- **Design of CIPP for Gravity & Pressure Applications**
- **Inspection & QA/QC**
- **Specifications & Tendering**
- **Key Notes for a successful CIPP project**
- **And much more!**

*Training Developed &
Conducted by:*



**The North American Society
for Trenchless Technology**

www.nastt.org

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You Need to Know CIPP!

Cured-In-Place Pipe (CIPP) technology is an effective trenchless pipeline rehabilitation method that may help to address many of your city's water and wastewater problems.

CIPP is one of the most widely used and accepted pipeline rehabilitation methods. It significantly reduces infiltration and ex-filtration. CIPP is cost-effective and increases flow capacity. And because it is trenchless, traffic congestion and site disruption are significantly reduced.

Learn more about the benefits of the CIPP process by attending this special one-day course on February 16, 2010, at the Springhill Suites Greenbrier in Chesapeake, Virginia.

Course Objective

The CIPP course is geared to provide an in-depth overview of wastewater mainline and lateral pipe rehabilitation using CIPP from planning and design to job completion.

CIPP Course Topics

- CIPP Definition, Description, Background & Methods
- CIPP Application Range in Trenchless Rehabilitation
- Design of CIPP for Gravity Applications
- Design of CIPP for Pressure Applications
- Construction & Installation
- Specifications & Tendering
- Inspection & QA/QC

Who Should Attend

- Engineering consultants
- Utility engineers and managers
- Government engineers and public works managers
- Contractors
- Others with responsibilities for implementing or managing construction projects using trenchless construction techniques

Expert Course Instructors

Chris Macey, P.E., is the National Technical Specialist for UMA|AECOM Canada's Community Infrastructure Market Sector. Chris has hands-on experience in the application of CIPP technology for over 25 years.

Kaleel Rahaim is the business development manager of the Pipeline Remediation Polymers Division at Interplastic Corporation, which manufactures the polymers used in the CIPP process.

Take Home Valuable Materials

You will receive comprehensive course handouts and other useful references.

Earn 0.8 Continuing Education Units

For every 10 hours of attendance and participation, you will earn one Continuing Education Unit (CEU). CEUs are maintained and issued through NASTT's partnership with Louisiana Tech University.

Registration Fees

\$250 (before Oct.20th) and \$275 (after Oct 20th). Your fee includes attendance to the one-day course, AM break, lunch, PM break, course handouts, Continuing Education Unit certificate issued by Louisiana Tech University. To register, complete and return the form included in this brochure.

Location

Cary Holiday Inn & Suites
5630 Dillard Drive
Cary, North Carolina
Phone: 919 851-1220

For More Information

Angela M. Ghosh – NAST
Phone: 703-217-1382
E-mail: aghosh@nastt.org

Peter Kurz – Tri-State Utilities Co.
Office: 757-366-9505
E-mail: petek@tristateutilities.com

COURSE AGENDA

NASTT's Cured-in-Place Pipe Good Practices Course November 9, 2011 ▪ Cary Holiday Inn & Suites ▪ Cary, North Carolina

Wednesday, November 9th

8:00 am – 5:00 pm

- 8:00 am *Opening Remarks & Part 1 – Introduction*
- 9:00 am **Part 2 – Design & Construction of CIPP**
- Description, history & methods
- 10:00 am *Break*
- 10:15 am **Part 3 – CIPP Application Range in Trenchless Technologies**
- Types of pipelines used in CIPP process
 - Practical size, shape & length limitations
 - Types of CIPP materials
 - Basics of how CIPP interacts with other materials
 - Typical problems that can be addressed using CIPP
 - Practical advice on where, when and how to apply CIPP liners
- 11:15 am **Part 4 – CIPP Testing**
- Liner properties for liner design
 - Liner compatibility with waste stream
 - Design Requirements
- 12:00 pm *Lunch*
- 1:00 pm **Part 5 – Design Considerations for Gravity Pipelines**
- Wall thickness for a CIPP liner
 - Existing pipeline problems
 - Problem(s) in the liner's design
- 1:45 pm **Part 6 – Key Notes for a Successful Project**
- Selection of right materials & process
 - Design by an experienced, registered engineer
 - Clear & detailed well-written tender & contract specifications
 - Field quality control & quality assurance program
- 2:45 pm *Break*
- 3:00 pm **Part 7 – Inspection & QA/QC**
- Compliance with by-laws & safety regulations
 - Contract specifications
 - Documentation
 - Protection of owner's interests
 - Public relations
- 4:30 pm *Q&A Period, Closing Remarks & Course Evaluations*
- 5:00 pm *Course Adjourned*

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REGISTRATION FORM

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ATTENDEE INFORMATION

Name(s) _____

Title _____

Company/Organization _____

Street Address _____

City _____ State _____ Zip _____

Phone _____ Fax _____ E-mail _____

REGISTRATION OPTIONS

Early Registration - *before Oct 20th* _____ x \$250/person = \$ _____

Late Registration - *after Oct 20th* _____ x \$275/person = \$ _____

Total Amount Due \$ _____

PAYMENT INFORMATION

Please charge my Visa or MasterCard.

Name on the Card _____

Account No. _____ Exp: _____

Authorized Signature _____ Date _____

For Office Use Only
Paid On:

Authorization #

Please find enclosed my check payable to: Tri-State Utilities Co.

Return your completed registration form with payment to:
Tri-State Utilities Co. – 2111 Smith Avenue, Chesapeake, VA 23320
Phone: 757-366-9505 ▪ Fax: 757-366-5150