



# Pipelines 2012

Innovations in Design, Construction, Operations,  
and Maintenance—Doing More with Less

**Edited by**

Robert J. Card, P.E.

Michael K. Kenny, P.E.

**ASCE**

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# PIPELINES 2012

*INNOVATIONS IN DESIGN, CONSTRUCTION,  
OPERATIONS, AND MAINTENANCE—DOING  
MORE WITH LESS*

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PROCEEDINGS OF THE PIPELINES 2012 CONFERENCE

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August 19-22, 2012  
Miami Beach, Florida

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The Pipeline Division of the American Society of Civil Engineers

EDITED BY  
Robert J. Card, P.E.  
Michael K. Kenny, P.E.

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# Preface

The worldwide market and demand for infrastructure materials and other economic events in recent times has forced agencies, engineers, manufacturers, contractors, and operators to evaluate the management, safety, operation, and maintenance issues in designing, constructing, maintaining, and operating water, wastewater, gas, and other pipeline infrastructure. All interested parties associated with pipelines are considering “Doing More with Less” and managing their “Hidden Assets”.

To assist with this, ASCE Pipeline Division’s International Conference was held August 19 through 22, 2012 in Miami, Florida. “Innovations in Design, Construction, Operations and Maintenance, Doing More with Less” – the conference theme – is a comment on sustainable infrastructure with special attention being paid to managing existing assets and focusing on advances in pipeline rehabilitation, risk management, safety, and pipeline engineering and construction. It is crucial that ASCE remains at the leading edge in ensuring the public’s safety and confidence that the pipeline infrastructure is reliable, cost effective, and secure so we can maintain our way of life moving forward with confidence into the future.

Putting together a conference that addresses all these areas is a huge undertaking that requires the cooperation of many individuals. We had the honor to work with a dedicated group of individuals, enthusiastic exhibitors, and extremely generous sponsors. The Conference Steering Committee was invaluable in organizing an excellent technical program as testament in these Proceedings. Particular thanks go to all our sponsors of the conference. On behalf of each of these individuals, exhibitors, and companies that were our sponsors, we trust you will enjoy the conference.

Finally, the intent of this conference was to provide a forum to discuss the development, applications, advantages and limitations, and lessons learned as we move forward in our profession. Our hope is that this conference provided each attendee with the professional opportunity to explore their own vision of change and challenged their own expectations and beliefs.

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Michael K. Kenny, P.E., M.ASCE  
*Technical Co-Chairs*

## Track Chairs

Design Management – John Luka  
Condition Assessment – Mike Higgins  
Construction – Rich Mielke  
Advances in Technology – Tim Kennedy  
Operations & Maintenance – John J. Galleher Jr.

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# Table of Contents

## Advances in Technology

|   |           |
|---|-----------|
| <b>Performance Testing of Underground Storage Tank against Buckling</b>   | <b>1</b>  |
| Wayne Geyer and Robert J. Card  |           |
| <b>Organizing and Managing the Implementation of Large Diameter Tapping and Plugging Technology for a Major Sanitary Improvement Project in Ho Chi Minh City, Vietnam</b> | <b>11</b> |
| Charles Herckis   |           |
| <b>Ductile Iron Corrosion Theories and Science</b>  | <b>21</b> |
| Michael J. Szeliga  |           |
| <b>Design and Development of a Web-Based National Database for Water and Wastewater Pipeline Infrastructure Systems</b>   | <b>28</b> |
| Sunil Sinha and Walter Graf   |           |
| <b>Fatigue of Plastic Water Pipe: A Technical Review with Recommendations for PE4710 Pipe Design Fatigue</b>  | <b>38</b> |
| K. Oliphant, M. Conrad, and W. Bryce  |           |
| <b>Novel Resilience Assessment Methodology for Water Distribution Systems</b>   | <b>61</b> |
| Leon F. Gay and Sunil K. Sinha  |           |
| <b>Contingency and Emergency: Prior Planning, “Real Live” Execution, and Post Mortem of the Results</b>   | <b>70</b> |
| Scott Christensen, Mark Russo, Greg Kodweis, and John Plattsmier  |           |
| <b>Water Transmission Main Condition Assessment in the Last Frontier: A Magnanimous Endeavor for the Anchorage Water and Wastewater Utility</b>                           | <b>84</b> |
| Stephen Nuss, Bruce Robson, and Myron Shenkiryk   |           |

|   |            |
|---|------------|
| <b>Protection of Petroleum and Natural Gas Pipelines Crossing Debris Flow Watersheds—A Case Study in the Qinling Mountains, Western China</b>                                   | <b>102</b> |
| Y. G. Ge, Y. Zhao, J. Mou, D. J. Li, Q. Li, D. Y. Wang, and Z. M. Su  |            |
| <b>Meeting the Challenge of Pipeline Emergency Repair</b>   | <b>118</b> |
| Michael R. McReynolds and Tao Peng  |            |
| <b>PressureCast Steel Pipe Combined Load Test Set-Up and Execution</b>  | <b>128</b> |
| Michael Murphy and Qizhong Sheng  |            |
| <b>Unidirectional Flushing (UDF): It's Not Just about Cleaning the System Anymore—Benefits and Advantages That West Springfield, Massachusetts, Achieved with Their Program</b> | <b>136</b> |
| Jeff Auer, William Jappy, and Cliff Jones   |            |
| <b>Transmission Main and Plastic Pipe Leak Detection Using Advanced Correlation Technology: Case Studies</b>  | <b>147</b> |
| Marc Bracken and Bill Cain  |            |
| <b>Installation of a 42 Inch HDPE Pipeline at Seminole County's Regional Water Treatment Facility at Yankee Lake</b>  | <b>158</b> |
| Carol Hunter, Hector Casablanca, William Meredith, and Dean Garcia  |            |
| <b>Risk Management in Real Time—Transient Control Testing on a Large Conveyance System</b>  | <b>167</b> |
| Peter Pfister, Scott Williams, Shahin Rezania, and Doug Lubben  |            |
| <b>Integration of HDPE 4710 Materials for Potable Water Distribution Systems</b>  | <b>177</b> |
| Greg Scoby  |            |
| <b>Five Years and Counting: The Evolution of WSSC's PCCP Management Program</b>   | <b>186</b> |
| Travis B. Wagner, David M. Burke, Mike Woodcock, and Gregory Fick   |            |

|  |            |
|--|------------|
| <b>City of Westminster's Sewer Collection System Assessment Program: A Case Study</b>                            | <b>198</b> |
| Keith Bushdiecker, Bryon Wood, and Matt Gough  |            |
| <b>GIS: A Decision Making Tool for Pipeline Asset Management in Atlanta</b>                                      | <b>209</b> |
| Eric L. Glover, Raymond J. Wilke, Michael Flinn, and Sriram Krishnan   |            |
| <b>Intake Screen Alternatives for the IPL Project—Planning for Mussels and Variable Intake Depths</b>            | <b>218</b> |
| Jerry W. Snead II and Shelly Hattan  |            |
| <b>Variability of Pipe Coating Pull-Off Adhesion Measurements on Cylindrical Steel Pipelines</b>                 | <b>231</b> |
| S. G. Croll, C. A. Vetter, and B. D. Keil  |            |
| <b>Evaluation of Statically-Loaded Large Diameter Steel Pipe Embedded with Lime Stabilized Native Clay Soils</b> | <b>242</b> |
| Jwala Raj Sharma, Mohammad Najafi, David Marshall, and Abhay Jain  |            |
| <b>Seismic Fragility Evaluation of Water Pipelines: Part 1—Current Practice</b>                                  | <b>257</b> |
| Sri Rajah, Souheil Nasr, Keith Ferguson, and J. Christopher Ey   |            |

## Coastal Issues

|   |            |
|---|------------|
| <b>Galveston's Life Line—Considerations When Designing an Aerial Crossing</b> | <b>268</b> |
| John Martinez, Rafael Ortega, and Rachel Leclair                              |            |

## Condition Assessment

|  |            |
|--|------------|
| <b>Who Says You Need Multiple Wire Breaks for a PCCP Pipe to Fail?</b> | <b>278</b> |
| John J. Galleher, Jr., and Andrew E. Romer                             |            |



|   |            |
|---|------------|
| <b>Condition Evaluation of Asbestos Cement Water Mains</b>  | <b>288</b> |
| Rudaba Chowdhury, Yafei Hu, and Dunling Wang  |            |
| <b>Numbers Don't Lie: PCCP Performance and Deterioration Based on a Statistical Review of a Decade of Condition Assessment Data</b> | <b>298</b> |
| Michael S. Higgins, Allison Stroebele, and Sana Zahidi  |            |
| <b>From Pilot to Permanent: Evolution of LWC's PCCP Condition Assessment Program</b>  | <b>307</b> |
| Andrew F. Williams, Eric R. Pruitt, and Michael J. Livermore  |            |
| <b>A Methodology for Condition Assessment of Pressure Water Mains</b>   | <b>319</b> |
| S. G. Farrelly and P. H. Ferguson   |            |
| <b>Implementation of Sustainability Initiatives and the Envision Rating System on the Omaha CSO Program</b>                         | <b>329</b> |
| Derek Gardels, Mike McMeekin, Marty Grate, Scott Aurit, Tom Heinemann, and Nancy Pridal   |            |
| <b>PCCP Condition Assessment Methodology: What Is Right for You?</b>  | <b>339</b> |
| Michael D. Gossett, Graham E. C. Bell, Steven R. Fox, Keith R. Bushdiecker, and Richard Pousard, Jr.                                |            |
| <b>Enhancing Asset Management Priority Ranking—A Case Study</b>   | <b>345</b> |
| Rafael Ortega and Ashley D. Ross  |            |
| <b>Condition Assessment of 23 Lift Stations</b>   | <b>356</b> |
| Jose L. Villalobos  |            |
| <b>Integrated Monitoring Strategy for Large Diameter Pre-Stressed Concrete Pipelines—A Case Study at Waternet, the Netherlands</b>  | <b>378</b> |
| Margit Eggebrecht, Marco Dignum, and Geert Jan van Heck   |            |
| <b>Protecting the Magic City</b>  | <b>388</b> |
| Rod J. Lovett, Jayson Page, Bryan Fletcher, and Steve Sandstrum   |            |



|   |            |
|---|------------|
| <b>Pilot Large Diameter Pipeline Seismic Fragility Assessment</b>   | <b>396</b> |
| Yogesh Prashar, Roberts McMullin, Bill Cain, and Xavier Irias   |            |
| <b>Restoring Water Network Reliability and Control in the City of Baltimore</b>   | <b>408</b> |
| David C. Lewis, Cliff Jones, Cliff Wilson, and Opinder Singh  |            |
| <b>New Approaches to Inspect Water Pipelines Running under Rivers, Lakes, Levies, and Critical Transport Infrastructure</b>   | <b>413</b> |
| J. B. Conant, Cliff Jones, and Ryan J. Reynolds   |            |
| <b>Reducing the Cost of Failure: Time Is the Unforgiving Enemy during Pipeline Ruptures</b>   | <b>421</b> |
| Cliff Wilson and Cliff Jones  |            |
| <b>The Problem of Leakage Detection on Large Diameter Mains</b>   | <b>432</b> |
| S. Hamilton, D. Krywyj, and Cliff Jones   |            |
| <b>Condition Assessment of a Ductile Iron Force Main Using Guided Wave Technology: Case Study of Underwood Creek Force Main, Milwaukee Metropolitan Sewerage District</b> | <b>442</b> |
| Bryon Livingston, Urbain Boudjou, and Roger Royer   |            |
| <b>Failure Risk of Bar-Wrapped Pipe with Broken Bars and Corroded Cylinder</b>  | <b>457</b> |
| Ali Alavinasab, Muthu Chandrasekaran, and Edward Padewski III   |            |
| <b>Sewer Main Condition Assessment in the Last Frontier</b>   | <b>467</b> |
| Mark Corsentino, Jack Burnam, and Mark Wade   |            |
| <b>LRFD Approach to CFRP Renewal of Prestressed Concrete Cylinder Pipes</b>   | <b>481</b> |
| Naiyu Wang and Mehdi S. Zarghamee   |            |
| <b>Rehabilitation of Large Diameter PCCP: Relining and Sliplining with Steel Pipe</b>   | <b>494</b> |
| Shah Rahman, Greg Smith, Richard Mielke, and Brent Keil   |            |

|   |            |
|---|------------|
| <b>Miami-Dade Case Study: Managing and Minimizing Pipeline Outages through the Use of Carbon Fiber</b>  | <b>505</b> |
| R. A. Terrero, R. Coates, Luis Aguiar, A. B. Pridmore, and J. Alexander   |            |
| <b>Field Comparison of the Axis Vacuum Microtunneling Technology vs. Open Cut Excavation in Glenview, Illinois</b>                                    | <b>515</b> |
| S. T. Ariaratnam, K. R. Piratla, and A. Cohen   |            |
| <b>Technology—How Far Can We Go?</b>  | <b>523</b> |
| Stuart Hamilton and Cliff Jones   |            |
| <b>Southeast Collector Trunk Sewer Route Selection: The Regional Municipalities of York and Durham, Ontario, Canada</b>                               | <b>531</b> |
| M. Swan, W. Green, and J. Whittard  |            |
| <b>Consideration of Embodied Energy in Sustainability Evaluation of Pipeline Projects</b>   | <b>544</b> |
| ASCE Task Committee for the Sustainable Design of Pipelines   |            |
| <b>Chemical Amendment of Excavated Trench Material for Sustainable Reuse</b>  | <b>552</b> |
| Anand J. Puppala, Bhaskar Chittoori, Shelly Hattan, and David Marshall  |            |
| <b>Condition Assessments Using Pipe Penetrating Radar: The Metro Wastewater Reclamation District, Denver, CO—Harvard Gulch Interceptor Case Study</b> | <b>562</b> |
| Csaba Ékes and Jeff Maier   |            |

## Construction

|   |            |
|---|------------|
| <b>Route Selection for a \$2.2 Billion Pipeline</b>                               | <b>576</b> |
| Alan Hutson, Jeff Payne, and Zachary Huff   |            |
| <b>Replacement of a Critical Water Supply Pipeline in a Dense Urban Landscape</b> | <b>592</b> |
| Amanda Powers and David Bennett   |            |