

REFERENCES

- Ajdari, E. (2016). Volatile Organic Compound (VOC) Emission during Cured-in-Place-Pipe (CIPP) Sewer Pipe Rehabilitation. *Ph.D. Dissertation*, University of New Orleans, LA, in partial fulfillment of the requirements for the degree of Doctor of Philosophy.
- Allouche, E. N., & Gilchrist, A. (2004). Quantifying construction related social costs. *Proc. NASTT No-Dig Conference*, 2004.
- A. Vilventhan and S. Kalidindi, "Interrelationships of factors causing delays in the relocation of utilities", *Engineering, Construction and Architectural Management*, vol. 23, no. 3, pp. 349-368, 2016. Available: 10.1108/ecam-10-2014-0127.
- Allouche, E., Alam, S., Simicevic, J. and Sterling, R. (2012). A Retrospective Evaluation of Cured-In-Place Pipe (CIPP) Used in Municipal Gravity Sewers. *Environmental Protection Agency*. Trenchless Technology Center at Louisiana Tech University, Battelle Memorial Institute, Jason Consultants, Inc., New Jersey and Ohio, 2012.
- Alsadi, A. (2019). Evaluation of Carbon Footprint during the Life-Cycle of Four Different Pipe Materials. *Ph.D. Dissertation*, Louisiana Tech, 2019.
- Ariaratnam, S.T., Piratla, K., Cohen, A. and Olson, M. (2013). Quantification of sustainability index for underground utility infrastructure projects. *Journal of Construction Engineering and Management*, 139(12), p.A4013002.
- Ariaratnam, S.T., Lueke, J.S. and Michael, J.K. (2014). Current trends in pipe bursting for renewal of underground infrastructure systems in North America. *Tunnelling and Underground Space Technology*, 39, pp.41-49.
- ASCE (2019). Guidelines for the Sustainable Design of Pipelines. Reston, VA (Under Print).

ASCE (2010). Trenchless Renewal of Culverts and Storm Sewers. *Manuals and Reports on Engineering Practice No. 120.*, Reston, VA.

Atalah, A. (2004). Ground movement in hard rock conditions related to Pipe bursting. *Proc. ASCE Pipelines 2004*.

AWT Engineering Pipelines, September 2000, State of the Industry Report on Trenchless Technologies

Beaudet, B. A., Tobey, B., and Harder, S. (2019). Life Cycle Cost Analysis for Decision Making in Collection System Rehabilitation. *Proc. NASTT No-Dig Show*, Chicago, IL, Mar 17-20, 2019.

Caltrans Division of Research and Innovation-Preliminary Investigation (2012). Environmental Effects of Cured-in-Place Pipe Repairs. Produced by *CTC & Associates LLC*, August 2012.

Carbon Trust. (2007). Carbon footprinting: An introduction for organizations. London: Carbon Trust.

CE Delft. (2017). *Handbook Environmental Prices*. Netherlands, 2017.

Chilana, L. (2011). Carbon footprint analysis of a large diameter water transmission pipeline installation. *Master's Thesis*, The University of Texas at Arlington, 2011.

Chilana, L., A. H. Bhatt, M. Najafi, and M. Sattler (2016). Comparison of carbon footprints of steel versus concrete pipelines for water transmission. *Journal of the Air & Waste Management Association*, vol. 66, no. 5, pp. 518–527, May 016.

Crawford, S., & Lungu, C. T. (2011). Influence of Temperature on Styrene Emission from a Vinyl Ester Resin Thermoset Composite Material. *Science of the Total Environment*, 409(18), 3403-3408.

UDA and CMC project report in Sri Lanka Funded by ADB 2016.

Donaldson B. (2012). Water Quality Implications of Culvert Repair Options: Vinyl Ester Based and Ultraviolet Cured-in-Place Pipe Liners. *Virginia Center for Transportation Innovation & Research*, Virginia, 2012.

Donaldson, B.M., and A. Baker. (2008). The Environmental Implications of Cured-in-Place Pipe Rehabilitation. VTRC 08-CR12, *Virginia Transportation Research Council*, Charlottesville, 2008.

Dusseldorp, A.; and Schols, E. (2006). Rioolrenovatie met kousmethoden-Achtergronden bij het informatieblad. RIVM rapport 609021038/2006, Bilthoven, RIVM- Rijksinstituut voor Volksgezondheid en Milieu.

Gowen, A. (2004). Fumes from Va. sewer work cited in illnesses: Alexandria Officials Reevaluating Effects of Styrene Vapor on Residents. *Washington Post*, May 12, B08.

Hashemi, B. (2008). Construction Cost of Underground Infrastructure Renewal: A Comparison of Traditional Open-Cut and Pipe Bursting Technology. *Master's Thesis*, University of Texas at Arlington, 2008.

Hashemi, B., Iseley, T., & Raulston, J. (2011). Water Pipeline Renewal Evaluation Using AWWA Class IV CIPP, Pipe Bursting, and Open-cut. *Proc. International Conference on Pipelines and Trenchless Technology*, October 26-29, 2011.

Joshi, A. (2012). A Carbon Dioxide Comparison of Open Cut and Pipe Bursting. Master of Technology Management Plan II Graduate Projects. Paper 7.

Jung, Y., Sinha, S. (2007). Evaluation of Trenchless Technology Methods for Municipal Infrastructure System. *Journal of Infrastructure Systems*, Vol. 13, No. 2, pp. 144- 156.

Kabir, G., Tesfamariam, S., & Sadiq, R. (2015). Predicting water main failures using bayesian

model averaging and survival modelling approach. *Reliability Engineering & System Safety*, 142, 498-514.

Kamat, S. M. (2011). Comparison of Dust Generation from Open Cut And Trenchless Technology Methods for Utility Construction. *Master's Thesis*, The University of Texa.

Kaushal, V., Najafi, M., Sattler, M., and Schug, K. (2019a). Evaluation of Potential Release of Organic Chemicals in the Steam Exhaust and Other Release Points during Pipe Rehabilitation Using the Trenchless Cured-In-Place Pipe (CIPP) Method. *Proc. North American Society for Trenchless Technology-No-Dig Conference*, Chicago, IL.

Kleiner, Y., Adams, B. J., & Rogers, J. S. (2001). Water distribution network renewal planning. *Journal of Computing in Civil Engineering*, 15(1), 15-26.

ISTT, Trenchless Technologies Resource Centre, Guidelines, Social Costs and Environmental Impact Sustainability, October 2006 ISTT, Trenchless Technologies Resource Centre, Overviews, Costs and Environmental Impact, October 2006

Kozman, DP. (2013). Evaluation of Cured-in-Place Pipe Allows Structural Renewal of Drinking Water Pipe. *R S Technik LLC*, USA, 2013.

Kulkarni, T., M. Kanchwala, M. Najafi, and C. Fisher. (2011). Cost comparison of PVC water pipe for horizontal directional drilling (HDD) and open-cut installations. *Proc. North American Society for Trenchless Technology (NASTT)*, Washington, D.C.

Lee, H. (2006). Cost comparison of pipeline asset replacement: Open-cut and Pipe- bursting. *Master's Thesis*, Michigan State University, 2006.

Lee H., Najafi, M., & Matthys, J. (2007). Cost comparison of pipeline asset replacement: Open-cut and Pipe-bursting. *Proc. ASCE Pipelines 2007*, Boston, Massachusetts.

Lee, R. K. (2008). Risk Associated with CIPP Lining of Stormwater Pipes and the Release of Styrene. *Proc. North American Society for Trenchless Technology (NASTT) NO- DIG*

Conference, NASTT, Dallas, TX, 2008; Paper E-1-05.

Loendorf, T., & Waters, D. (2009). Styrene Removal Adds to the Challenges of Rehabilitating Sewer Pipeline in Reno, Nevada. *Proc. of the North American Society for Trenchless Technology (NASTT) No-Dig Conference*. Liverpool, NY.

Lueke, J. S., Matthews, J. C., Stowe, R., and Lamont, C. (2015). Comparing Carbon Footprints of Trenchless Water Main Renewal Technologies. *Proc. NASTT No-DigShow, 2015*, Denver, Co.

Maldikar, S. (2010). An Investigation of Productivity Loss Due to Outdoor Noise Conditions. *Master's Thesis*, The University of Texas at Arlington, 2010.

Malek Mohammadi, M. (2019). Development of Condition Prediction Models for Sanitary Sewer Pipes. *Doctoral Dissertation*, University of Texas, Arlington, TX.

Milousi, M. (2018). Stochastic Life Cycle Assessment and Cost analysis in Renewable Energy Systems. *Master's Thesis*, School of Production Engineering and Management, Technical University of Crete, Chania, Greece.

Mohit, S., Monfared, M. A. N., Kang, C., and Bayat, A. 2017. Comparative study of greenhouse gas emissions from hand tunneling and pilot tube method underground construction methods. *Journal of Green Building*, 12(4), 54-69.

Najafi, M. and Kim, K. O. (2004). Life-Cycle-Cost Comparison of Trenchless and Conventional Open-Cut Pipeline Construction Projects. *Proc. ASCE Pipeline Division Specialty Congress*, 2004.

Najafi, M. and Gokhale, S.B. (2005). *Trenchless Technology: Pipeline and Utility Design, Construction, and Renewal*, New York: McGraw-Hill; 2005.

Najafi, M. (2011). *Pipeline Rehabilitation Systems for Service Life Extension - Chapter 10*. University of Texas at Arlington, USA, 2011.

Najafi, M. (2016). *Pipeline Infrastructure Renewal and Asset Management*, New York: McGraw-Hill Education; 2016.

National Ready-Mixed Concrete Association. (2008). Concrete CO2 Fact Sheet, 2008.

Osman, H., & Bainbridge, K. (2010). Comparison of statistical deterioration models for water distribution networks. *Journal of Performance of Constructed Facilities*, 25(3), 259-266.

Pandey, D., Agrawal, M., and Pandey, J. S. 2011. Carbon footprint: current methods of estimation. *Environmental monitoring and assessment*, 178(1-4), 135-160.

Piehl, R. (2005). Summary of trenchless technology for use with USDA Forest Service culverts. US Department of Agriculture, *Forest Service*, San Dimas Technology and Development Center.

Johanna Pucker, Erez N. Allouche, Raymond L. Sterling, 2006, Social Costs Associated with Trenchless Projects: Case Histories in North America and Europe

Raymond Mohammed, Mohammed Najafi, Behnam Hashemi, October 01, 2008, Underground Infrastructure

Management, Cost Comparison of Open-cut and Trenchless Methods for Renewing Sewer Lines

Sendes, S., K. Ra, E. Conkling, B. Boor, M. Nuruddin, J. Howarter, J. Youngblood, L. Kobos, J. Shannahan, C. Jafvert, and A. Whelton. (2017). Worksite chemical air emissions and worker exposure during sanitary sewer and stormwater pipe rehabilitation using cured-in-place-pipe (CIPP). *Environmental Science & Technology Letters*, 4(8), 325-333, 2017.

Tabor, M. L. (2014). The Influence of Rehabilitated Stormwater Infrastructure on Water Quality and *Daphnia magna* Toxicity: A Field and Laboratory Investigation. *Master's Thesis*, University of South Alabama, 2014.

Tabor, M., D. Newman, and A. Whelton. (2014). Stormwater Chemical Contamination Caused by Cured-in-Place Pipe (CIPP) Infrastructure Rehabilitation Activities. *Environmental Science & Technology*, 2014.

Tafuri, A. and Selvakumar, A. (2001). Wastewater Collection System Infrastructure Research Needs in the USA. *Urban Water*, USA, 2001.

US Environmental Protection Agency EPA (2016). Social Cost of Carbon. EPA, 2016.

Visentin, C., da Silva Trentin, A. W., Braun, A. B., & Thomé, A. (2019). Lifecycle assessment of environmental and economic impacts of nano-iron synthesis process for application in contaminated site remediation. *Journal of Cleaner Production*.

Willett, M. (2017). Industrial Hygiene Evaluation: CIPP-Styrene Exposure. Prince William County Service Authority, Woodbridge, VA, 2017.

Zhao, J. Q. and Rajani, B. (2002). Construction and Rehabilitation Costs for Buried Pipe with a Focus on Trenchless Technologies. *Final Report*, Institute for Research in Construction National Research.

Brady, K.C., M. Burtwell, Thomson, J.C., Pipe, Britain), G. and Britain., G. (2001). *Mitigating the Disruption Caused by Utility Street Works*.

Hunt, D.V.L., Nash, D. and Rogers, C.D.F. (2014). *Sustainable utility placement via Multi-Utility Tunnels*.