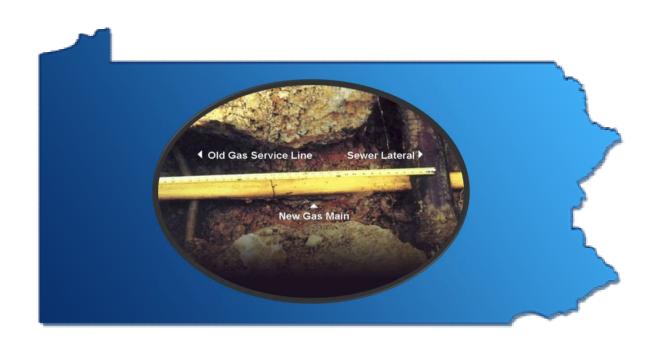
Cross Bores in Pennsylvania:





"Leaving a Legacy of Safety"

Utility Public Safety Alliance Weehawken, NJ April 20, 2017



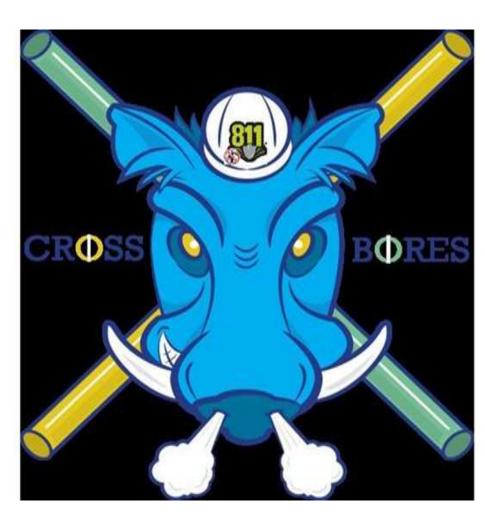
Eric Swartley – UGI Utilities, Inc.

- Sr. Manager Damage Prevention, Claims & Public Awareness
- 38 years experience in Gas Distribution
- PA One-Call Board of Directors & Chair Cross Bore Task Force
- Common Ground Alliance Co-Chair Stakeholder Advocacy
 Committee & Best Practices Committee Cross Bore TR
- AGA Peer to Peer Review Group
- Northeast Gas Distribution Council Board of Directors

Discussion items

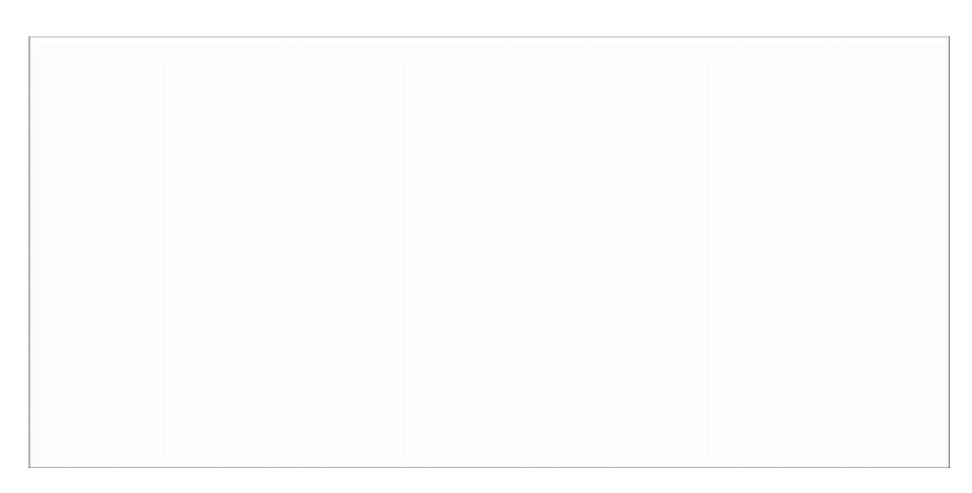


- What's a Cross Bore?
- PA Cross Bore Journey
- Two-tiers of Cross Bores or What's in your DIMP Plan?
- One Call Cross Bore Task Force, aren't they the 811 People?
- Promoting the "Million Dollar Call"
- The Path Ahead



We are all Homeowners





What does a Legacy Cross Bore look like?







It is important to understand, any facility installed using "Trenchless Excavation" can create a Cross Bore unless measures are taken in the design and/or construction phases to eliminate the potential.

PA Cross Bore Journey



- 2013 Cross Bore issue arrives in PA
 - Columbia Gas self reports
 - Harrisburg Plumber inquires
 - * PUC sends FL 3-13 to PA Gas operators
 - Pennsylvania One-Call System forms Cross Bore Task Force
- Cross Bore Task Force (CBTF) goal is to determine POCS role and make recommendations to the One Call Board on any actions items.
- CBTF defined Cross Bores as a two-tiered issue;
 - Legacy those Cross Bores that exist today and create a risk/liability
 - Prevention responsible use of trenchless excavation
- PA Gas Utilities assess risk & gain a better understanding of Cross Bores

*Public Utility Inquiry?



December 2013 Public Utility Commission inquiry of PA Gas companies regarding;

- 1) Past boring installation procedures and effective date of present procedures that eliminate Cross Bore potential.
- 2) Assess risk of legacy cross bores in your system
- 3) Develop a mitigation plan dependent on #2 above.
- 4) Provide a Public Awareness Plan for plumbers and the public regarding cross bores.



Two-Tiers and What's in Your DIMP Plan?



Legacy

- Those that exist and create a risk
- How have you assessed your risk?
- Have you reviewed your Claims history?
- Is your method of installation well documented?
- Did you complete Field Inspections?
- What did your results suggest?
- Do you educate and document in your Public Awareness Plan?

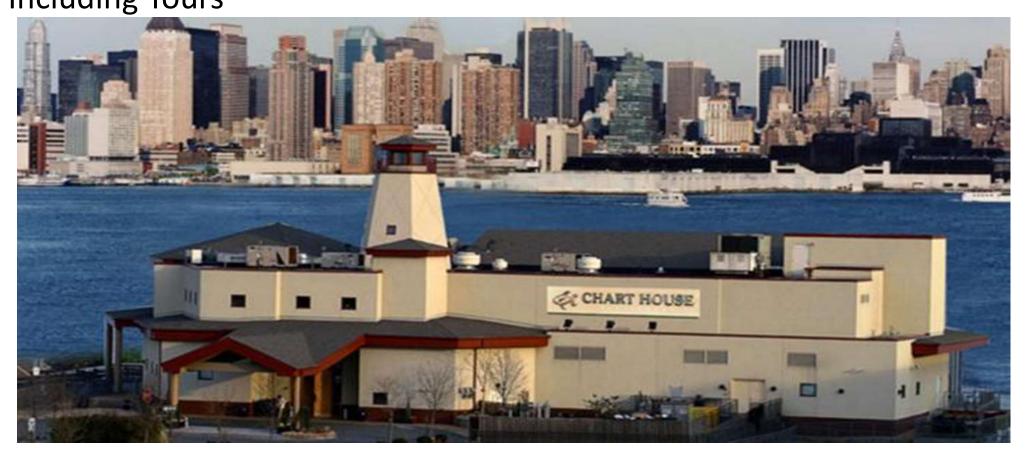
Prevention

- Are you making new Cross Bores?
- Do your Standards support risk reduction?
- Does your One Call statute require spotting/accounting for all crossings when using trenchless excavation?
- How are you confirming installations don't create new Cross Bores?
 - Inspection
 - Spotting
 - Pre and/or Post Camera
 - Leaving it to the Installer

Cross-Bored Laterals Can Be Found in Any



Community.... Including Yours



Or Any City!





Has anyone checked this location for a CB?



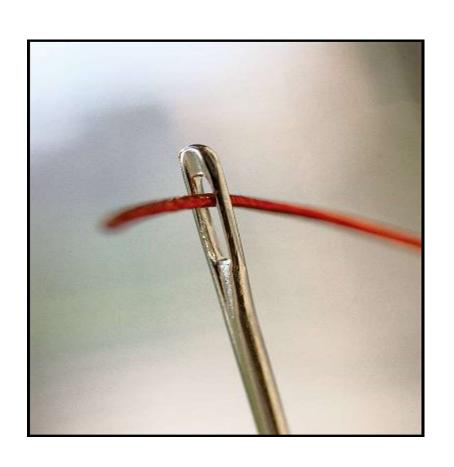
Sheraton Lincoln Harbor Hotel



Trenchless Excavation Technology & Prevention



It's about Accuracy & Accountability



- PA One Call Law Underground Utility Line Protection Act of – 2006 as amended. (Section 5, article 11.2)
- Adopted NASTT's HDD Good Practices Guidelines.
- Requires positive confirmation of all facility crossings and also provides requirements for when running parallel to an existing facility if using trenchless excavation methods.
- Past Construction Practices are an excellent predictor of future Cross Bores.

Trenchless Technologies have been in use to install



utility lines for 40+ years.



Horizontal Directional Drilling

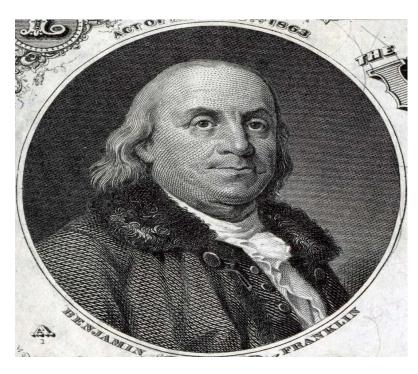


Pneumatic Missiles

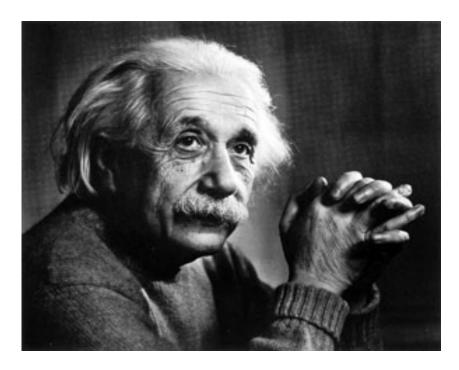


Preventing Future Cross Bores: Two schools of thought?





An ounce of prevention is worth a pound of cure.



The definition of insanity is repeating the same behavior and expecting a different outcome.

Legacy inspection results and reports of Cross Bores support the need for a more responsible Design & Construction Process as it relates to Cross Bores.

PA One Call – Cross Bore Task Force



- Formed in December 2013 in response to a PUC Cross Bore inquiry of the Natural Gas Distribution companies in Pennsylvania
- By design, a diverse group of stakeholders
- Developed (6) recommendations:
 - 1. Develop a "Call Before You Clear" 811 Ticket Type
 - 2. Develop educational material for plumbers, sewer operators & rental centers
 - 3. Develop material for Excavators that promotes responsible use of Trenchless Technologies
 - 4. Develop a strategy to address the marking of sewer laterals when a One Call is placed
 - 5. Promote a change in the specifications for sewer lateral installations that would include a requirement to be locatable using standard industry technologies
 - 6. Develop an "automated response" to a One Call notification where trenchless excavation is the method of installation i.e. (HDD, missiles, augers, etc.)

Cross Bore Task Force Members



- Greg Dunlap Central Penn DD
- Mike Kyle Lancaster Area Sewer Authority
- Jerry Contino Columbia Gas
- Ray Geesey Columbia Gas
- Brandon Bogdon* PA American Water
- Sunil Patel* PA PUC
- Eric Swartley UGI Utilities
- Tim Greenland NUCA
- Walt Kryzanowski President, Local 690
- Dean Rainville* National Fuel Gas
- Mike McGraw Sr. PA Plumbing, Heating, Cooling Contractors

- Deb Kitner Energy Association of PA
- Chris Schillinger PPL Electric
- Jason Peters Lehigh County Authority
- Charlie McCadden BG&E
- Doug Meeshaw PA Home Builder Assoc.
- Don Zombek People's Gas
- Brian Camfield* PECO
- David Bonner* PECO
- John Galligan The PipeShark, Principal
- Armando Ferri J Paris Excavating/NUCA
- Robb Kalbach Utility Service Group

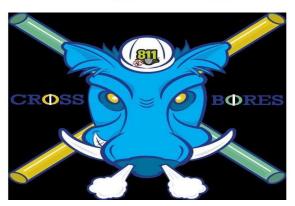
Italicized = PA One Call Board Member or Alternate
* Replaced original Task Force Member

Status in PA Today



- ✓ Acquired approval from Minnesota to use their "Call Before You Clear" tagline.
- ✓ Approval from People's Gas to use the "Blue Boar" logo
- ✓ "Call B4 You Clear" Emergency Ticket Type went live 7/27/16.
- ✓ Public Awareness in the form of Education & Outreach.
 - Stakeholder Questionnaire
 - Stakeholder brochure (mailed 12/2017)
 - Educational Video/PPT
 - Wastewater & Trade magazine article
 - Recent partnership with PA PHCC
- It's all about Safety!







What's a "Million Dollar Call"?



- Is it Ed McMahon showing up at your front door with a check?
- Is it a heads up for a phishing scam on the Internet that hacks your checking account?
- Is it a Drain Clearer in PA, calling 811, and reporting a potential Cross Bore?
 - Cost of a reportable incident with no injuries or fatalities begins at \$1MM.
 - Education & raising awareness should include a process that provides a safety net.
 - Don't spend the valuable time to re-invent the wheel
 - One Call already has the infrastructure to apply a "Call Before You Clear" program. Make the CALL!



The Path Ahead



- Pittsburgh April 26th & 27th Cross Bore Technology & Education, join us!
- Plumber relationships are key, contact your State PHCC Chapter.
- Employees are your greatest Ambassadors, educate them!
- Public & Customer facing campaigns (bill stuffers/social media/swag).
- If you're a CGA Member, support adoption of TR 2014-02 Cross Bores, currently in front of the Best Practices Committee.
- This industry is incredible in regard to sharing, other considerations:
- Rental Center warning tag program (Avista)
- Sewer line basement warning hanger/tag (National Grid)
- Plumber incentives Bounty program (UGI)
- On Line Learning Systems (NiSource/Columbia Gas)





For additional Information:

Cross Bore Safety Association www.crossboresafety.org

Pennsylvania One Call www.pa1call.org



