

PHMSA Pipeline Safety R&D Forum

A Distribution Operator View: “Sharing in the Responsibility of Preventing Damages”

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Risks LDC's are facing

- ▶ **Excavation Damages to distribution facilities, due to:**
 - ▶ No pre-planning/design thus not accounting for location of existing facilities
 - ▶ Inability to locate plastic gas lines with conventional locate equipment
 - ▶ Excavation within prescribed Tolerance Zones using mechanized equipment
 - ▶ Irresponsible use of Trenchless Technologies
 - ▶ Responsible Project Ownership
 - ▶ Damages that are the result of the Excavator not notifying One Call
- ▶ **Legacy Cross Bores**
 - ▶ Incidents related to drain clearing activities (plumbers/DIY's/public)

Agenda: How do we address the Risks?

▶ **Distribution Facility Damages:**

- ▶ Plastic Pipe Locating Tools/Capabilities
- ▶ Project Planning & Management Tools
- ▶ Drone Technology
- ▶ Enhanced Positive Response
- ▶ Electronic Message Boards
- ▶ No1Call Reporting Program

▶ **Legacy Cross Bores**

- ▶ Call Before You Clear - Automated notification system
- ▶ Bio Balls

Damages #1

- ▶ **Multi - Project Coordination Tools (software)**
 - ▶ Incorporate multiple facility owner projects in a common GIS based tool
 - ▶ Provides for regional synergies driving potential cost savings and less disruptions to the public
 - ▶ Planning, designing, bidding, permitting & construction
 - ▶ Opportunity to promote greater degree of S.U.E.



Damages #2

- ▶ **Plastic Pipe Locating/Tools & Capabilities on Gas Distribution Systems**
 - ▶ Jameson Gas Service Line Tracer Kit
 - ▶ Jameson Gas Main Line Tracer
 - ▶ Bi-directional camera for PE facilities
 - ▶ Acoustical line locating i.e. MADE SA
 - ▶ Ground Penetrating Radar (needs HELP)



Damages #3

► Enhanced Positive Response

- Provides Excavator with verification with what was field marked for their request, so eliminates misunderstandings
- Includes One Call Center so their position as source for information is supported
- Increases Excavator – Facility Owner communications
- Promotes accountability
- Creates a shared responsibility environment



Damages #4

► Drone utilization:

- Document site conditions on a post mark out basis which provides accountability and potential behavior changes
- Potential to eliminate tolerance zone management and minimize damages to mismarked facilities
- Surveillance potential for critical facilities or problem excavators



Damages #5

▶ Highway Electronic Message Boards

- ▶ Uses existing infrastructure in place across the country in high traffic and high visibility locations
- ▶ Does not compete with core messages (off peak messaging)
- ▶ Promotes 811 awareness
- ▶ Programmable for seasonal and target audience outreach



Damages #6

▶ No One Call Reporting Program

- ▶ Provides for a call to 811 to report an excavation site where no paint, flags or markings are present
- ▶ Integrates into the One Call Emergency Ticket structure
- ▶ Uses smart phone to access Tickets Nearby Tool to confirm tickets in proximity to site (GPS).
- ▶ Prevents damages and promotes 811 awareness
- ▶ Creates the opportunity to involve employees in an incentive based rewards program
- ▶ Changes excavator behavior



What's a Cross Bore?



Legacy Cross Bores #1

- ▶ **Call Before You Clear - Notification system**
 - ▶ Addresses prior damages by trenchless technology installations
 - ▶ Provides a safety net for drain clearing community
 - ▶ Reduces incident potential on gas distribution systems
 - ▶ One stop approach to supporting potential cross bore sites
 - ▶ Potential to integrate with existing One Call systems



Legacy Cross Bores #2

- ▶ **Bio-degradable locate balls**
 - ▶ Provides for locating previously non-locatable sewer lines
 - ▶ Locates completed using conventional electronic locators
 - ▶ Environmentally friendly
 - ▶ Does not require excavation or sewer line entry
 - ▶ Reduces cross bore potential



Summary

- ▶ Preventing Damages:
 - ▶ Locating – Non locatable plastic pipe
 - ▶ Project Coordinating Tools/Software
 - ▶ EMB's - Electronic Message Boards
 - ▶ EPR - Enhanced Positive Response
 - ▶ Drones
 - ▶ No1Call Reporting Programs
- ▶ Legacy Cross Bores:
 - ▶ Legacy Cross Bore mitigation – “Call Before You Clear”
 - ▶ Biodegradable ball

THANK YOU.....we share in the responsibility

