

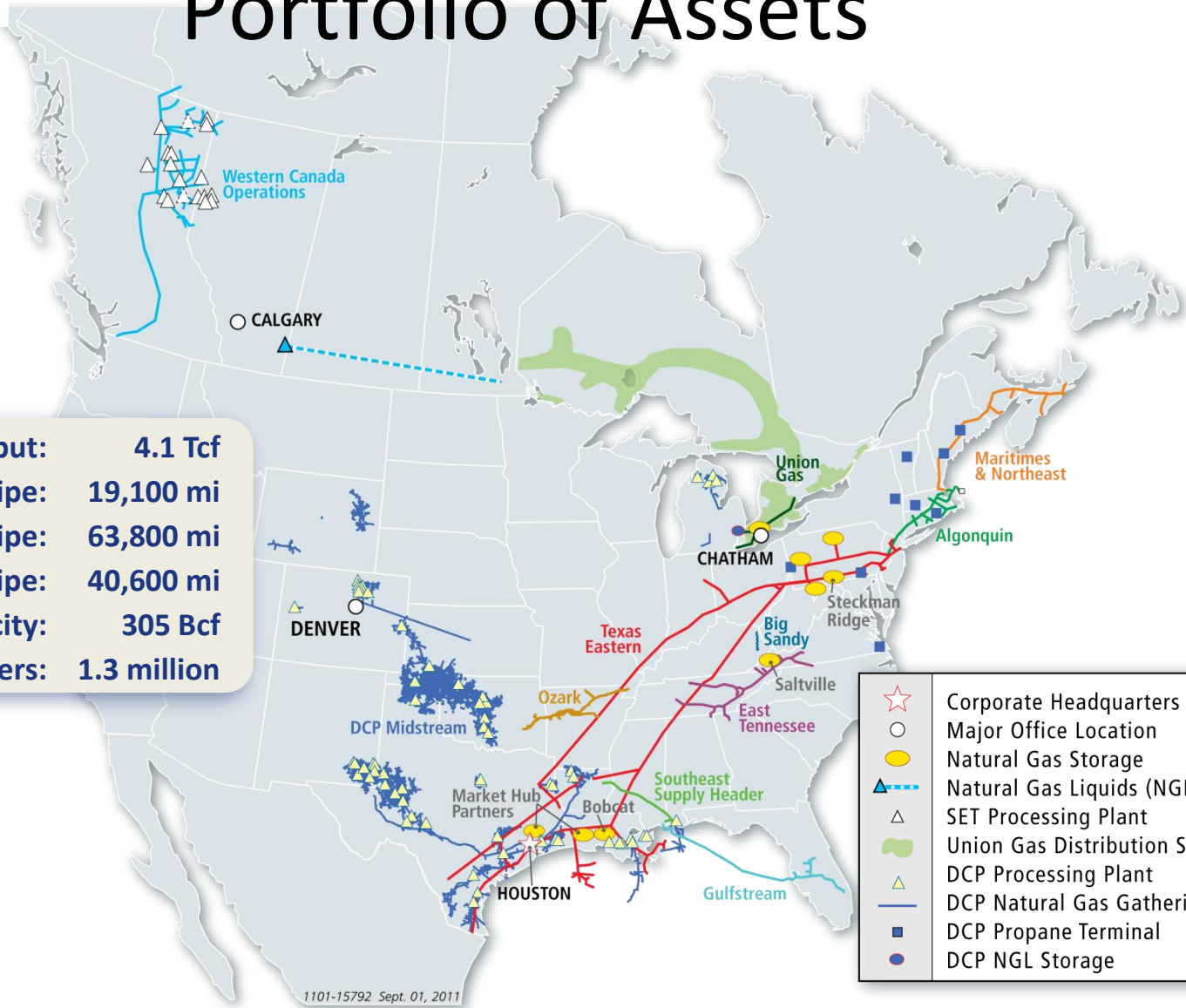
# Third Party Damage and Plant Protection – The Common Ground Alliance

*Bryan Goulden,  
Union Gas Limited*

# Agenda

- Plant Damage & Protection Overview
- Common Ground Alliance
- Responses:
  1. One Call
  2. Cross Bore Issue
  3. Other Distribution Best Practices

# Spectra Energy Portfolio of Assets



**Gas pipeline throughput:** 4.1 Tcf  
**Transmission pipe:** 19,100 mi  
**Gathering pipe:** 63,800 mi  
**Distribution pipe:** 40,600 mi  
**Storage capacity:** 305 Bcf  
**Retail customers:** 1.3 million

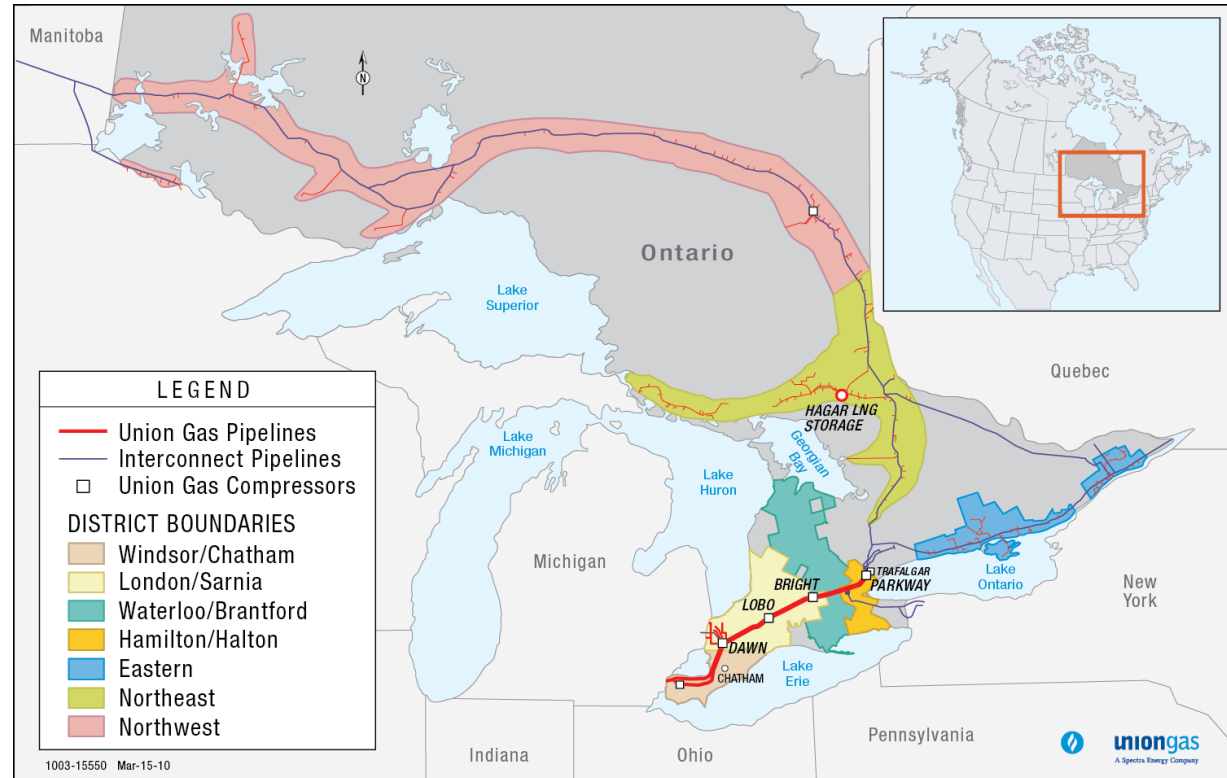
- ☆ Corporate Headquarters
- Major Office Location
- Natural Gas Storage
- ▲ Natural Gas Liquids (NGL) Pipeline
- △ SET Processing Plant
- Union Gas Distribution Service Area
- ▲ DCP Processing Plant
- DCP Natural Gas Gathering Pipeline
- DCP Propane Terminal
- DCP NGL Storage

1101-15792 Sept. 01, 2011

# Union Gas Limited

## Overview

- 100 years old!
- natural gas storage, transmission, and distribution company based in Ontario, Canada
- 2<sup>nd</sup> largest natural gas distributor in Canada (1.3 million customers)
- 400 communities served



# Overview - Buried Treasures

Oil and  
Gas  
Pipelines

Telephone,  
Cable TV and  
Fibre Optics

Electrical and  
Transit Signal  
Wires

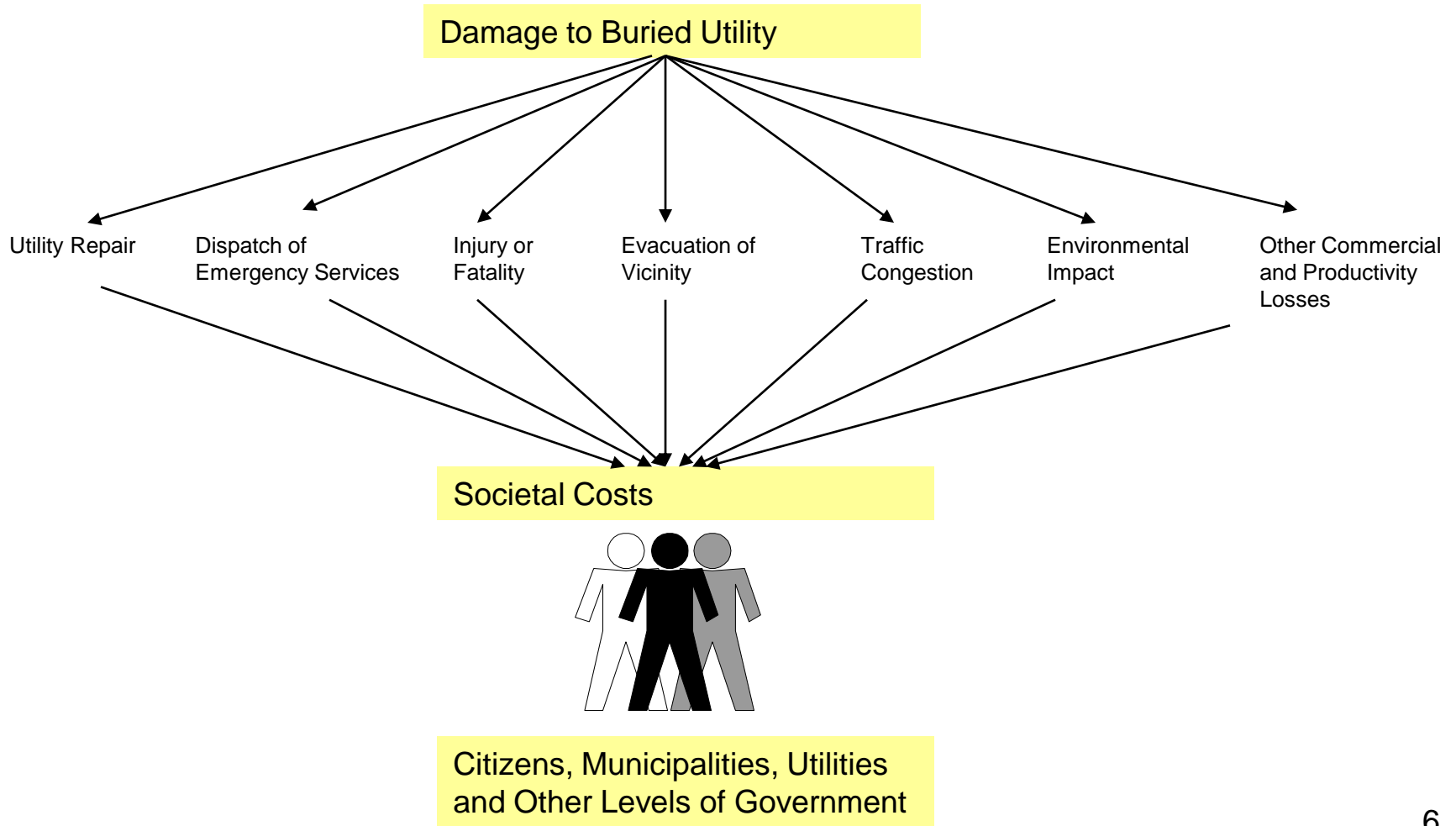
Sewer and  
Water Pipelines



- Utility infrastructure is an investment exceeding \$100 billion supporting Ontario's economic prosperity

# Plant Damages

## Direct and Indirect Costs



# Recent Plant Damage Incidents

- Gulf Coast - BP Deepwater Horizon (Oil Production)
- Marshal, Michigan –Enbridge Line Break (Oil Pipeline)
- San Bruno, California – PG&E (Gas transmission/ distribution)
- Allentown, Pennsylvania – UGI Utilities (Gas Distribution)

# Common Ground Alliance - History

- Formed 2000, as a member driven organization
- Promotes reduction in damages to all underground facilities in North America through shared responsibility among all stakeholders
- Emphasis on “best practices” established by consensus support
- 180 member organizations and 1400 individual members



# Common Ground Alliance - Membership

Stakeholders include:

- Excavators
- Locators
- Road builders
- Electric
- Telecommunications
- Oil
- Gas distribution/transmission
- Railroad
- One call
- Public works
- Equipment manufacturing
- Regulators
- Insurance
- Emergency services
- Engineering/ design

# Canadian Common Ground Alliance - History

- Canadian CGA was formed in 2006 to represent 5 Regional Partners with stand-alone organizations
- Manages damage prevention issues of national interest that can best address Regional Partner issues through a single voice

# Canadian Common Ground Alliance – Members

- 6 of Canada's 10 provinces accounting for 93% of Canada's population
  - British Columbia
  - Alberta
  - Saskatchewan
  - Manitoba
  - Ontario
  - Quebec

# 1. One Call – What is the issue?

- In Ontario, there are many underground utilities and “before you dig” locate requests can involve multiple parties (up to 13 separate phone calls)
- When underground utility lines such as gas, telephone, hydro or water are not located in advance of excavation they can be hit, causing serious damage and/or a public emergency
- A mandatory “One-Call” System will save municipalities, utilities, and excavators money while helping to protect the public they serve. A simplified and central contact point for all locate requests will increase:
  - Safety
  - Efficiency
  - Productivity

# Complicated Locate Process



## CITY OF OTTAWA

### IN CASE OF EMERGENCY CALL 911

*Seven working days before you dig, call your local utilities for a location of their service.*

		DAMAGE	LOCATES	GENERAL INQUIRIES
electrical power lines, cables, conduit, street lighting, traffic signals	Hydro One Distribution	1-888-664-9376	1-888-664-9376	
	Hydro One Transmission	1-888-664-9376	Ontario One Call	
	Hydro Ottawa	613-738-0188	Ontario One Call	613-738-0188
	City of Ottawa	311	311	311
	PW/G SC	1-800-463-1850	1-800-463-1850	
gas, oil, steam, condensate, chilled water, petroleum	Enbridge Gas Distribution	1-866-763-5427	Ontario One Call	Ontario One Call
	PW/G SC	1-800-463-1850	1-800-463-1850	
	Imperial Oil	1-519-339-2145	1-905-689-6462	
	Petro Canada	613-229-2655	613-727-8056	
	Trans Canada Pipeline	1-888-962-7222	Ontario One Call	
Trans Northern Pipeline	1-800-361-0608	Ontario One Call		
potable water	City of Ottawa Water	311	311	311
	PW/G SC	1-800-463-1850	1-800-463-1850	
sewers, drain lines	City of Ottawa Sewers	311	311	311
	PW/G SC	1-800-463-1850	1-800-463-1850	
Communication, alarm / signal line cables, conduit	Allstream	1-800-837-6448	1-800-837-6448	1-800-837-6448
	Atria	1-888-424-7771	1-888-424-7771	1-888-424-7771
	Bell	Ontario One Call	Ontario One Call	611
	City of Ottawa	311	311	311
	Group Telecom	Ontario One Call	Ontario One Call	Ontario One Call
	PW/G SC	1-800-463-1850	1-800-463-1850	
	House of Commons (HoC)	613-293-2537	613-293-2537	
	Privy Council of Canada (PCO)	613-286-8369	613-286-8369	
	Persona an Eastlink Company	1-866-737-7662	1-800-667-2864 x2264	
	P2P Fiber	1-877-727-3889	1-877-727-3889	1-877-727-3889
	Rogers	1-866-246-6362	1-800-738-7893	1-800-738-7893
	Telus	1-800-887-1221	Ontario One Call	
	Videotron	1-800-361-2727	Ontario One Call	Ontario One Call

\* Don't forget to report damaged plant using the Damage Information Reporting Tool (DIRT) at Ontario One Call

\*\* For City of Ottawa Tree & DC Transpo Issues Please Call 311\*

\*\* 311 is a local City of Ottawa number – for those outside of Ottawa please dial 613-580-2400

# One Call

## The U.S. Approach

- In the United States, participation in a “One-Call” System is mandatory
- Effective 2007, a single One Call phone number (811) has been used to request locates for utility lines, effective 2007
- Deterrent penalties differ across states. There appears to be a correlation between type of deterrent and compliance with One Call
- **Results:** Damages due to no locate in the United States have decreased from 225,000 in 2004 to 75,000 in 2008.

# One Call

## Ontario Approach

- One call systems currently exist on a voluntary membership basis in 5 Canadian provinces. One call participation is not mandatory in any Canadian province
- Excavators are legally required by federal law (2004) to call before they dig
- In 2009, there were almost 3200 natural gas line breaks in Ontario, 1267 were at Union Gas.
- Forty percent (40%) of natural gas damages in Ontario are a result of no locate.
- Estimated damages due to no locates cost Ontario taxpayers \$33 million per year

# What has Union Gas done?

- **On1Call** was established in 1996 by Union Gas, Bell Canada, and Enbridge Gas Distribution
  - Voluntary single-call service has grown to approximately 130 members represented by gas distribution/transmission, telecom, electric LDC, and municipalities.
- Union Gas was a founding member of the ORCGA which focuses on enhancing public safety and utility infrastructure reliability.
  - The ORCGA have been working on regulation in Ontario for a “One-Call” System and presented a draft to the Provincial Government in 2005.
- Over the past 18 months, the ORCGA and OOC have been supporting the Provincial Government on the “One-Call to Dig Project”.
- Despite these gains, participation continues to be voluntary and not all underground asset owners are members.



# Ontario One Call Next Steps

- Bill 180 “Ontario One Call Act” draft legislation introduced in Ontario Legislature in 2011. Not successfully passed into law
- Ontario One Call membership drive underway to increase voluntary membership; especially for municipalities
- Mandatory One Call system may be dependent on increase organizations voluntarily participating to a “critical mass”.

# Canadian Gas Association

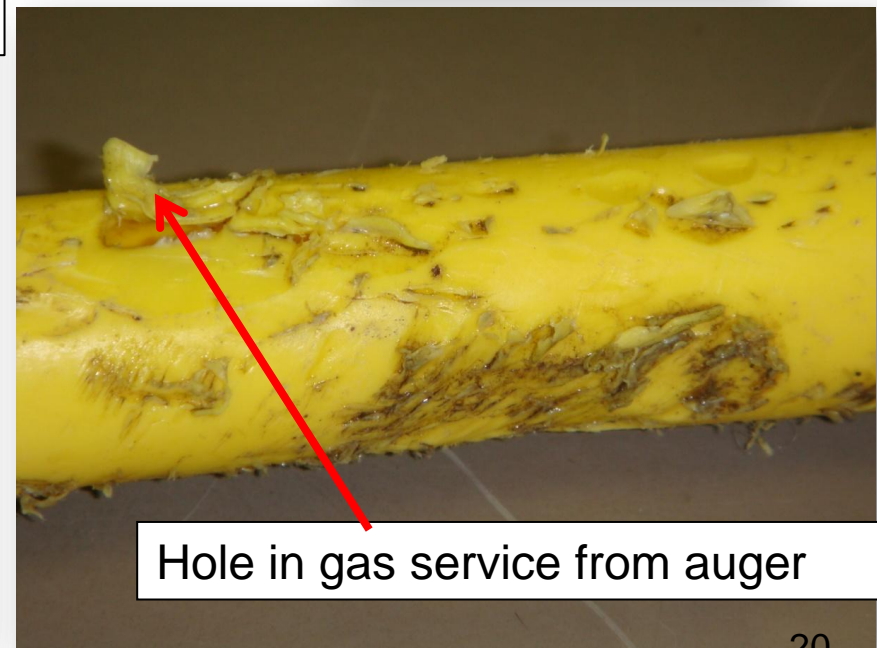
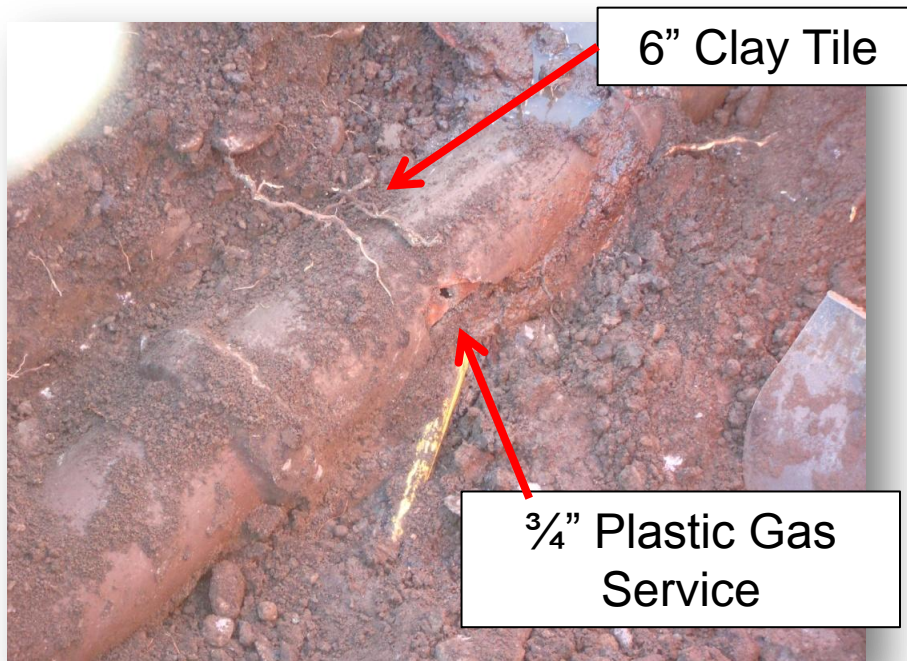
Damage Prevention Task Force pursuing three key objectives:

- One Canada-wide locate number
- Single One-Call organization serving each province with mandatory participation by all
- Requirement to “Call Before You Dig” with strong enforcement for non-compliance

## 2. Utility Cross-Bore

# Background: Utility Cross Bore

- A **utility cross bore** is an unintended **intersection** of an existing underground utility by a second utility, that can occur during construction that **uses trenchless technologies**.



# Sewer Cross Bore Incidents



# Utility Cross Bore Safety Program

## Sewer Safety Inspection (SSI) Program

- Locate sewer and gas lines (LSP)
- Response due to sewer blockage (emergency)

## Sewer Safety Investigation Program

- Camera sewer line (VIP)
- Emergency response from sewer locate
- Planned investigation of sewers from historical data

## New Installation Program

- Process and procedures to be used to ensure that new cross bores are not created when using trenchless technology

## Education and Awareness Program

- Municipalities
- Industry (plumbers, sewer companies, rental companies etc)
- Public (homeowners, businesses, institutions etc)

# Sewer Safety Inspection Process

## Home Owner / Plumber

- Report Sewer Blockage
- Interact with Representative

## Ontario One Call

- Dispatch Locate Service Provider (LSP)

## Locate Service Provider (LSP)

- Locate:
  - Sewer Lines
  - Gas Lines
  - Other Utilities if required

## Video Inspection Provider (VIP)

- Video Inspect Sewer Line
- Identify Cause of Blockage

## Union Gas Limited

- Excavate Site
- Identify Sewer Cross Bore
- Repair & Remediate Sewer Cross Bore



# Union Gas Cross Bore Program Highlights

- Alignment with other major gas utility
- TSSA requirement as of January 2012
- Opportunities for synergies between current Locate and new Cross Bore program
- Supports ON1Call Strategy
- Stakeholder acceptance is a challenge – communication underway



# 3. Other Distribution Best Practices