TRANSACTION RECORD (TR 2002-03)

Purpose: Preventing Damage when Utilizing Trenchless Excavation

Task Team: Don Heyer (Chair - One Call), Corky Hanson (State Regulator), Marilyn Ware (Electric), Steve Reiswig (Gas), Mike McCrary (Telecommunications), George Kennedy (Excavator), Larry Fortin (Excavator), Michael Lewzader (Railroad), Greg Menke (Excavator), Arch York (Telecommunications), Steve Kindschy (Gas), and Will Carey (Gas).

Transaction Record Opened: August 2002

Final Wording Approved by Board of Directors: September 16, 2005

Final Practice Wording to Appear in Best Practices Version 3.0 -**

PRACTICE STATEMENT:

All stakeholders adhere to all Best Practices and the following general guidelines prior to, during and after any trenchless excavation (as applicable):

DESCRIPTION STATEMENT:

Planning & Design:

1. The project owner and design engineer take prudent measures to make the determination to use trenchless excavation installation.
2. The project owner and design engineer coordinate with facility owners to design projects that maintain minimum radial clearances between the new facility and existing facilities. Minimum clearances are equal to or greater than applicable standards.
3. The project owner and design engineer establish line and grade of the proposed excavation to maintain the established minimum clearances.

One-Call Center:

Ask the excavator if trenchless excavation will be used.

Locating & Marking:

Locate in the area of the entrance pit, the trenchless excavation path and the exit pit when trenchless excavation is being used.

Excavation:

1. The excavator requests the location of underground facilities at the entrance pit, trenchless excavation path, and the exit pit by notifying the facility owner/operator through the one-call system.
2. The trenchless equipment operator performs a site inspection walking the trenchless excavation path prior to commencing work and has a good understanding of the job.
3. The trenchless excavation operator confirms and maintains the path and minimum clearances established by the project owner and design engineer by tracking and recording the path of the trenchless excavation until complete.

Means of tracking trenchless excavations include: electronic locating / guidance devices, pipe lasers, water levels, visual inspection, etc.

4. When existing facilities are known to be present but cannot be potholed due to local conditions the facility owner and the excavator meet to discuss how to safely proceed with the excavation.
5. Stop the trenchless excavation operations if an abnormal condition, unknown substructure or other hidden hazard is encountered. Proceed safely only after positive identification has been made.

References: *Provide references for any existing practices cited in Origin/Rationale*

American Gas Association (AGA), "Directional Drilling Damage Prevention Guidelines for the Natural Gas Industry" Technical Note December 30, 2004.

American Society of Civil Engineers, ASCE Manuals and Reports on Engineering Practice No. 89, "Pipeline Crossings", 1996.

Bennett, R.D., S.T. Ariaratnam, and C. Como "Horizontal Directional Drilling Good Practices Guidelines." HDD Consortium, Washington, DC, ISBN 1-928984-13-4, 2001

California Department of Transportation, CALTRANS, "CALTRANS Encroachment Permits – Guidelines and Specifications for HDD Installations, July 14, 2003."

Directional Crossing Contractors Association (DCCA), "Guidelines for Successful Directional Crossing Survey Standards." Dallas, TX, 1999.

Directional Crossing Contractors Association (DCCA), "Horizontal Drilling Safe Operations Guidelines." Dallas, TX, 1995.

Gas Research Institute, "Final Report – Guideline for the Application of Guided Horizontal Drilling to Install Gas Distribution Piping", GRI-96-0368, September 1996.

National Transportation Safety Board, "Safety Study: Protecting Public Safety Through Excavation Damage Prevention." Washington, DC, Dec. 1999.

National Utility Contractors Association (NUCA), "Trenchless Construction Methods and Soil Compatibility Manual, 3rd Edition." Washington, DC.

National Utility Locating Contractors Association (NULCA), "Excavation Practices & Procedures for Damage Prevention." Spooner, WI, 1996.

***Best Practices 3.0 to be published December 2005.*