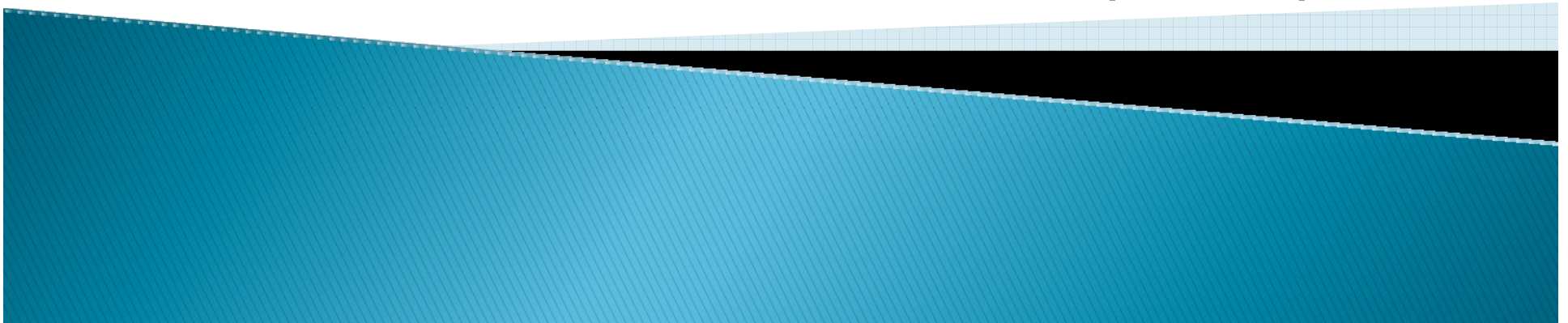


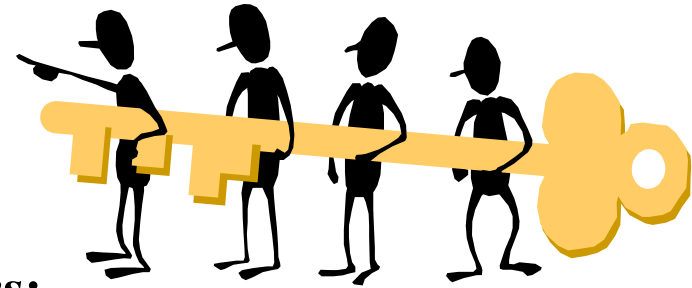
# LOCATING SEWER LATERALS FOR TRENCHLESS INSTALLATIONS

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Montana–Dakota Utilities Co.  
Rapid City, SD



# MNOPS Advisory:

## Alert Notice to Underground Gas Pipeline Operators *Preventing Sewer Service Lateral Cross Bores: Acceptable Practices and Documentation Requirements*



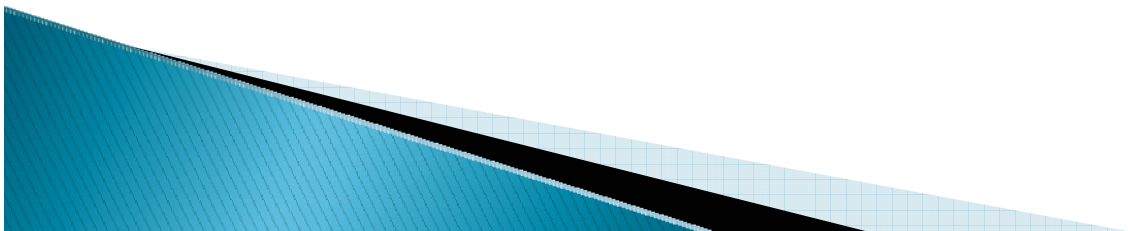
Date: May 10, 2010

Purpose: The purpose of this Alert Notice is to provide **guidance for gas pipeline installers on acceptable installation practices** and documentation requirements when installing gas mains and services.

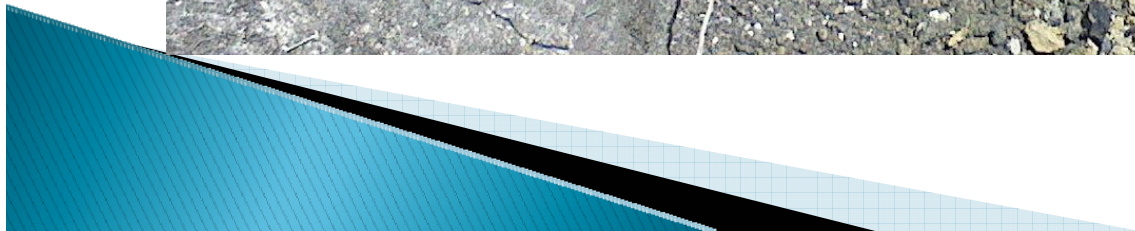
Background: The Minnesota Office of Pipeline Safety (MNOPS) is now aware of at least **155 instances in Minnesota where gas pipelines were inadvertently installed through privately owned sewer service laterals due to trenchless construction techniques**; MNOPS believes there are probably more.

The majority of these “cross bores” were found by plumbers while cleaning sewer service laterals. Since 2000, six gas lines have been punctured by sewer cleaning contractors. **On three occasions, the gas ignited, resulting in significant injuries and property damage.**

The following *Acceptable Practices and Documentation Requirements* were developed following a review of industry white papers, a review of previous cross-bore incidents, and discussions with gas distribution pipeline operators on widely available methods and practices.







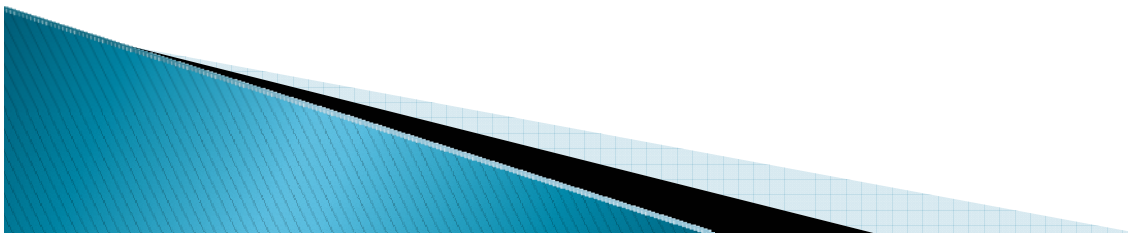




# 1. Review maps



and the construction site to ensure there are no potentially intersecting sewer service lines.

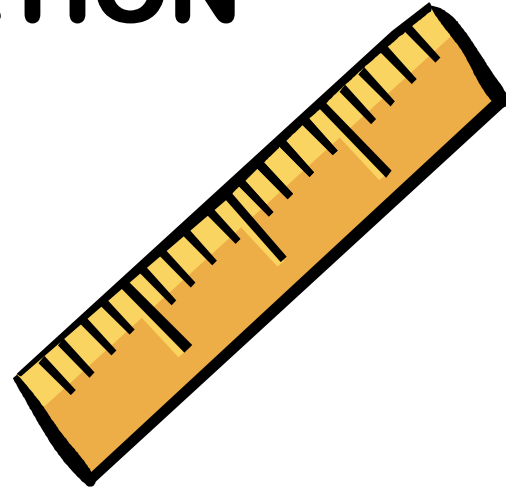


## **2. IF THERE ARE CROSSINGS**

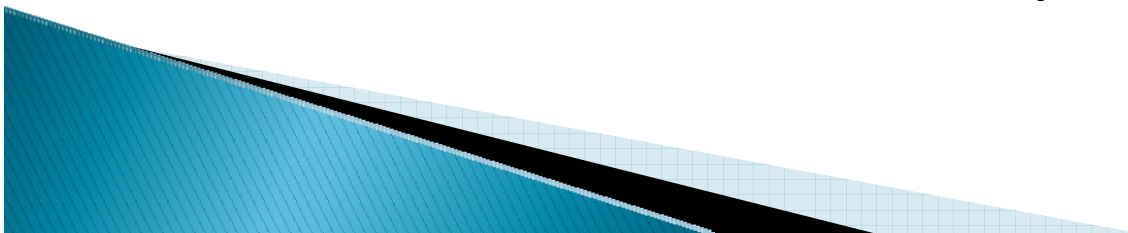


**then check elevations of sewer manhole depths and basement depth to ensure that if a crossing is bored in at 3 feet there will be at least 3 feet of separation. The minimum depth measured must be used. No assumed slope may be applied.**

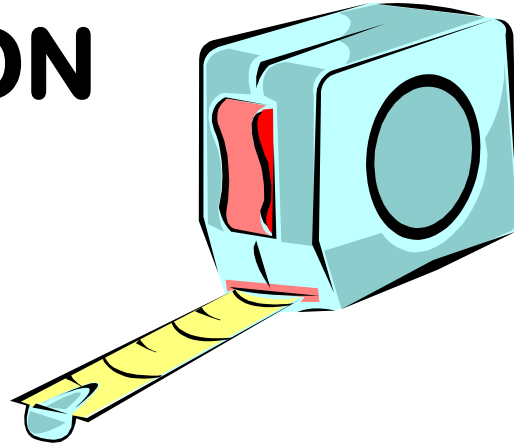
### **3. IF THERE IS LESS THAN 3 FEET OF SEPARATION**



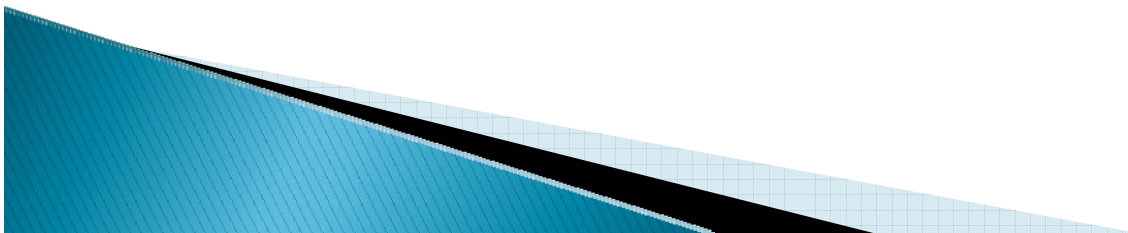
**then crossings must be physically located and exposed in a pothole. The crossing separation must be documented with a photograph.**



## **4. OR IF THERE IS LESS THAN 3 FEET OF SEPARATION**



**then crossings must be open  
trenched 10 feet either side of an  
electronically located sewer service  
or the entire lot length if the sewer  
service is not electronically located.**





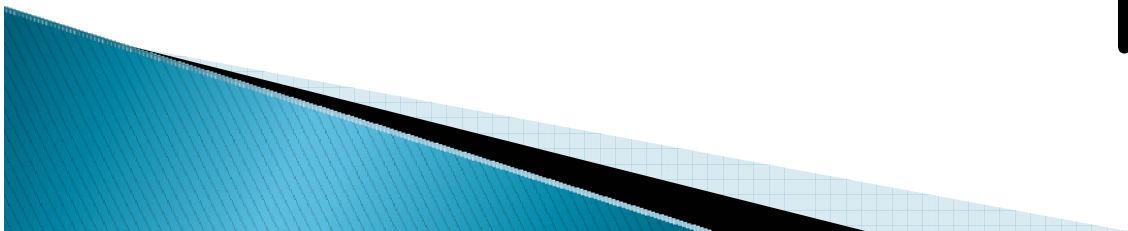
## 5. As a last resort...



install the crossing  
with a bore or plow  
and video



the sewer  
service before  
introducing  
gas into the  
line.



# RED FLAGS



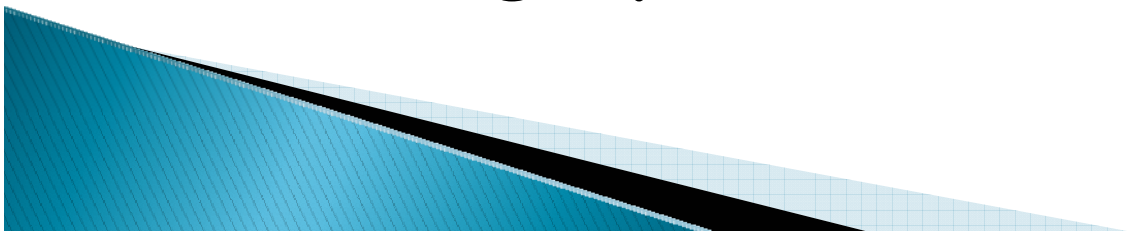
that would require extra vigilance and actions:

1. Slab construction
2. Crawl space construction
3. Split foyer, half out of the ground construction
4. Sloping terrain
5. Pressurized systems
6. Drain field systems
7. Home owner concerns
8. Previous experience

# DOCUMENTATION



1. Address
2. Method of Separation confirmed by:  
(example: "map review")
3. Name and date
4. Photographs





Questions???

Thank you. Happy St. Patrick's Day!!

