

The Formation of Fluid Migration Pathways through Utility Construction
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The Problem

A local gas and electric utility supplier threatened to terminate services after discovering an unknown explosive gas in several residential basements. It was determined that biogenically formed methane gas was transmitting throughout the neighborhood and into homes via the porous sanitary sewer and domestic water pipe bedding materials. An aggressive and creative interim remediation plan, utilizing the public sanitary sewer pipe bedding materials, averted disaster and allowed residents to stay in their homes. More importantly, lessons learned will prevent similar scenarios in the future.

Goals of Presentation

To inform and educate attendees of the potential fluid migration pathways created by the installation of sanitary sewers and by discussing corrective actions and means of prevention.

A Case Study

Archmont Knolls is a middle class subdivision in the Town of Colonie, near Albany, New York. In September of 2002, a resident informed the Niagara Mohawk Power Corporation (NIMO) of a gas odor in her home. The investigation later determined that prevailing winds drove the odor from a nearby gas leak into her residence. By the time NIMO responded, the odor was gone, but combustible gases were still detected in the basement. The source of the gas was a mystery and, once laboratory results determined the gas not to be that transmitted by the utility, NIMO threatened to terminate gas and electric service unless another agency accepted responsibility for securing the situation.