

# Champaign, Illinois, Manufactured Gas Plant Site

Ameren Illinois is committed to keeping you informed with regard to the ongoing work at the site of the former manufactured gas plant at 5<sup>th</sup> and Hill streets in Champaign. The on-site excavation for this project is complete. Ameren Illinois intends to obtain a No Further Remediation letter from the Illinois EPA for the site. However, an additional remediation measure remains to be addressed. Ameren Illinois and its contractors will be conducting in-situ chemical oxidation (ISCO) at the site to address soil impact around the site perimeter that could not be excavated during the 2009 – 2011 remediation. Additional information regarding the ISCO process to be performed at the site is provided below.

## What is In-Situ Chemical Oxidation?

In-situ chemical oxidation is an accepted remedial measure by which impacted soil can be treated 'in-situ,' or in place, as an alternative to excavation. A chemical oxidant is injected below the ground surface in areas of soil impact. After Injection, a chemical reaction takes place and the oxidant breaks down the soil impact, reducing the levels of impact.

## How and where will the oxidant be injected into the ground?

A series of injection points will be placed around the site perimeter in order to treat impacted areas along the site boundary that were not excavated. A soil drilling rig will be used to place a steel pipe and screen into the ground at each injection point. The steel pipes will be fitted with hoses, and the chemical oxidant will be pumped from storage containers through the steel pipes and into the ground. The chemical oxidant will be injected at various depths from approximately three to 40 feet, depending on the depth of the impacts at the area of injection.



### Figure: Potential ISCO Injection Areas





Above: Example of an ISCO injection point location.



Above: Chemical oxidant pumped from storage tanks to injection point location.

### What chemical oxidant will be used at the site?

The chemical oxidant will consist of a solution of iron and hydrogen peroxide. Once injected into the ground, the oxidant reacts with impacted soil and shallow water, and is used up in a matter of a few days. The hydrogen peroxide breaks down into water and oxygen, and the iron is oxidized.

## Will the oxidant affect surrounding properties?

The chemical oxidant reacts quickly after being injected into the ground. After the oxidant comes into contact with the surrounding soil, a reaction takes place and the oxidant breaks down into water and oxygen. It is estimated that the solution will disperse approximately 7.5 feet from each injection point; therefore, it should not affect surrounding properties.

#### When will the ISCO injections be completed?

The ISCO injection process is scheduled to begin upon Illinois EPA approval, which is expected in the second quarter of 2013. The injections will take approximately 4 to 6 months to complete.

#### Contacts and additional information:

We have placed a collection of documents associated with the project in a Site Information Repository located at the Douglass Branch of the Champaign Public Library (504 E. Grove Street, Champaign; ph. 1-217-403-2090) and at the Champaign City Building (102 N. Neil Street; ph. 1-217-403-7070.)

Site-related documents may also be found on the Ameren website at:

http://www.ameren.com/sites/aiu/Community/Pages/ChampaignMPGRemediation.aspx

If you have questions about this project, you may contact:

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