



Champaign Manufactured Gas Plant Environmental Project Open House

Ameren invites you to visit our Open House for the
Former Manufactured Gas Plant Site Environmental Project

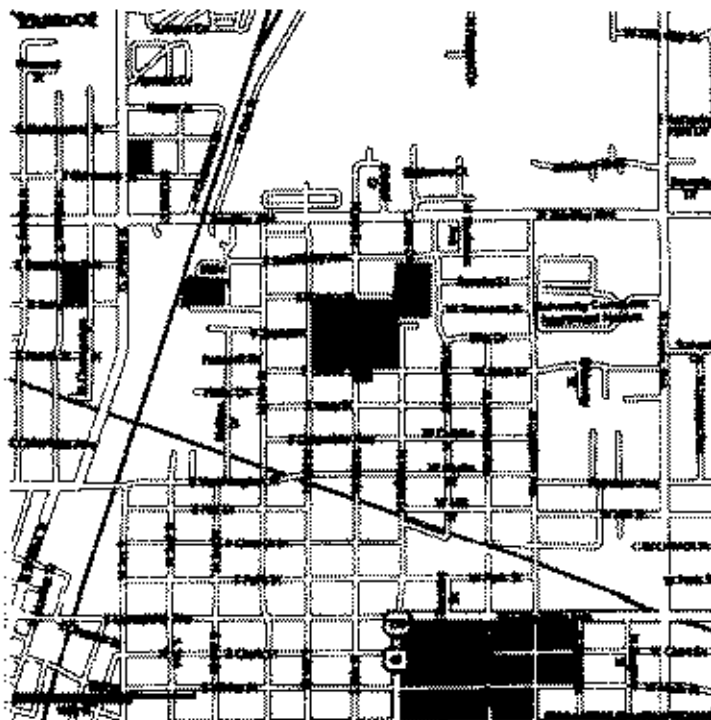
Washington Elementary School
606 E. Grove Street
Champaign, IL

Monday, September 8, 2008

Drop in anytime between
4:00 p.m. – 7:00 p.m.

Representatives from Ameren, the project contractor and the Illinois
Environmental Protection Agency will be available to answer your questions.

Displays and refreshments





Questions & Answers: Champaign, Illinois, Manufactured Gas Plant Site Project Update Fact Sheet – August 2008

In spring 2008, the Ameren Illinois Utilities collected additional soil and groundwater samples as part of the environmental investigation at the site of a former manufactured gas plant at 308 N. Fifth Street, Champaign, PSC, an environmental engineering firm under contract to Ameren, performed the work along the boundaries of our property and on nearby properties. The Illinois Environmental Protection Agency (Illinois EPA) and the U. S. EPA reviewed and approved the work plan for the sample collection, which was designed to provide more information about impacts to the environment from historical gas production operations. The results of this latest phase of the study confirmed previous findings that gas production byproducts, which are primarily coal tar, remain beneath the ground surface. These findings indicate additional cleanup will be needed at the site.

While the byproducts contain chemicals that may pose a health risk if people come into direct contact with them over a long period of time, the previous investigations and the spring 2008 results raised no concerns about immediate exposure. The impacted areas are limited and the highest levels of contamination are more than 10 feet below ground. The Ameren Illinois Utilities are working with the Illinois EPA to address the contaminants that were found on and off of the former manufactured gas plant property.

This fact sheet updates the January 2008 fact sheet.

Q: What are manufactured gas plants?

A: Manufactured gas plants (MGPs) produced gas from coal or oil for lighting, heating and cooking during the era prior to the availability of natural gas from interstate pipelines. Manufactured gas plants were active in Illinois from about the mid-1800s until the 1940s.

Q: What is the history of the Champaign manufactured gas plant property?

A: Predecessor companies of the Ameren Illinois Utilities produced gas from coal and oil on the property. The manufactured gas was stored in large, cylindrical above-ground holders before distribution to the community. Between the 1930s and early 1950s, the plant was used only occasionally to supplement natural gas. Most of the plant structures were removed from the property in the late 1950s, except for the booster house. An American Legion post used this building between 1979 and 1991, when Illinois Power reacquired the property.

Q: What residues were created during the gas manufacturing process?

A: As with many industrial processes, gas manufacturing produced residues. Coal tars, coke, and ash were the primary residues of the gas manufacturing process. Both the coal tars and coke were valuable byproducts. Coke was the remaining portion of the coal after the process used to manufacture gas was complete. Byproduct coke was used as a heating fuel at the

manufactured gas plant and was sold to others. Coal tars also served as a fuel for heating the plant and had market value. The tars were sold to the chemical industry for the manufacture of dyes, explosives, medicines, and perfumes and for use in creosote (wood preservative) and road tar. Today, coal tars are found in soaps and shampoos for dry skin and scalp, driveway sealers and a variety of dyes, drugs and paints.

Q: What are coal tars?

A: Coal tars are thick, black, brown or red-brown opaque liquids or solid materials produced during the gas production process. Coal tars contain a number of chemically distinct compounds. Polycyclic aromatic hydrocarbon compounds, or PAHs, are one class of chemicals in coal tars. PAHs are produced in combustion processes, such as burning coal, oil and wood and, therefore, are widespread in the environment. Today, PAHs are found in many roofing materials, wood preservatives, asphalt paving and pavement sealers. Another class of chemicals found in coal tar is known as volatile organic compounds (VOCs). They evaporate easily into the open air, but could exist for a long time underground. Some of these volatile chemicals are found in gasoline and in many petroleum-based consumer products.

Q: Is there anything in the residues to make them harmful?

A: There are many different chemical compounds in gas plant residues. Some compounds in coal tars, coke and ash may produce health problems, ranging from minor to more serious. For example, some PAHs can irritate the skin and nose and throat, and high levels of or prolonged exposure to VOCs can cause nausea and headaches. Scientists have determined that frequent or daily exposure in a work setting to some PAHs and VOCs can pose an increased risk of cancer.

Q: Did the 2008 off-site investigation identify any health risks to local residents?

A: No. The recent off-site investigation confirmed the conclusions of previous investigations. The site presents no immediate health threat to the public. While the residues contain some chemical compounds that could pose a health risk in certain circumstances, the degree of risk depends on the potential for people to be exposed to them at levels that could be harmful.

An environmental investigation looks at how people could come in contact with residues and/or impacted soil and water. Possible routes of exposure include skin contact and inhaling or swallowing (ingesting) the substances. The attached drawing shows the locations where our recent investigations found MGP residues in soil. The Illinois EPA and USEPA guidelines for projects like this require that we consider a potential for direct contact or ingestion of contaminants if those contaminants are found within three feet of the ground surface. Impacts in this zone were found only in street or railroad rights-of-way, where human occupancy is not a concern. The potential for exposure to contaminants at these locations is quite low because these locations are not likely to be occupied by people for extended periods of time.

According to Illinois EPA and USEPA guidelines, contaminants that are deeper than three feet, but shallower than 10 feet do not pose a concern for skin contact or ingestion, but could be a concern for the inhalation if persons occupy the property for long periods of time. In the area surrounding the Champaign MGP, contaminants in this zone were found primarily in street or railroad rights-of-way, where human occupancy is not a concern.

Soil contaminants that are deeper than 10 feet do not present a concern for either skin contact and ingestion or inhalation. Nevertheless, these contaminants must be addressed to ensure that exposure does not occur in the future. There has been little potential for extended contact with buried materials at the Champaign site.

Also, people could be exposed to contaminated groundwater if they use a well for drinking water purposes. While there are impacts to groundwater which will be addressed, no one is

using this groundwater. The site and surrounding area are served by the Illinois-American Water Company. The public water supply comes from wells which are a mile or more away from the site, and they are not affected by the MGP site.

The Ameren Illinois Utilities continue to work with the Illinois EPA, the city of Champaign and the owners of affected properties to address MGP impacts wherever they are found. Though there is currently no concern for neighborhood residents to be exposed to these impacts, the Ameren Illinois Utilities will take the necessary steps to ensure that exposure does not occur in the future.

Q: What work has been performed as part of the environmental project?

A: Environmental engineering firms under contract to Ameren and Illinois Power, which the Ameren Illinois Utilities acquired in 2004, investigated soil and groundwater conditions in several phases at the property and in areas on all four sides of our property. Studies were performed in 1986, 1990, 1992 and 1997.

Tarry residues were found underground in the vicinity of old plant structures, and laboratory analyses of soil and groundwater samples detected chemical compounds typically found at former manufactured gas plant sites.

In the winter of 1997-98, Illinois Power removed tar and other materials that were a major source of the soil and groundwater contamination. Philip Environmental Services Corp., under contract to Illinois Power, performed the work in accordance with an Illinois EPA-approved work plan and an air monitoring program. The contractor excavated tar and other residual material from structures that remained below the property, backfilled the areas and restored the surface with gravel, topsoil and grass.

In order to meet Illinois EPA's revised requirements for cleaning up contaminated properties, in summer 2004, the contractor returned to the site to further investigate the northern portion of the manufactured gas plant site and adjacent property to the north and east. Workers used boring equipment to collect soil samples and a backhoe to excavate areas where former gas manufacturing structures had been located. As with previous investigations, the air was monitored for vapors and dust whenever this work was being performed to protect the workers and neighborhood residents.

Workers returned to the site in spring 2008 to install more groundwater monitoring wells and collect additional soil and groundwater samples in response to the state and federal EPAs' comments on the Comprehensive Site Investigation Report of the 2004. The sampling was conducted under a work plan approved by the two EPAs.

Q: How were the limits of the MGP impacts defined?

A: We identified potential sources of MGP contaminants on the site, such as gas holders or other gas manufacturing equipment. We collected soil and groundwater samples near these potential sources and we moved outward until we reached the limits of impact. We confirmed that we reached the limits of MGP impact when we obtained soil or groundwater samples that met the Illinois EPA's cleanup objectives or when the data evaluation indicated that the impact did not come from the MGP. Other sources could include creosote-treated wood, asphalt streets, releases of diesel fuel or gasoline from former gas stations, etc. The off-site investigation showed that the off-site MGP impacts to soil and groundwater were limited to a maximum distance of 150 feet from the site. At most locations, the maximum distance was much less.

Q: What are the major findings of the 2008 Comprehensive Site Investigation Report?

A: Major conclusions of the report are:

- There are impacts to soil on the Ameren Illinois Utilities property from historic manufactured gas operations that will require additional cleanup (remedial) work.
- There are impacts to shallow soil offsite to the north, northwest and south that are unrelated to manufactured gas operations.
- The manufactured gas-related impacts to soil offsite to the north and northwest are at least three feet below the ground surface.
- Some off-site impacts were found in shallow soil, but these were limited to street and railroad rights of way. Although the contaminants exceeded the Illinois EPA's Tier 1 Residential Cleanup Objectives, they do not present a long-term health concern because people do not occupy these rights of way for residential purposes. Ameren Illinois Utilities will work to address these impacts, as appropriate, with the owners of the rights of way.
- Groundwater has been impacted; however, no one is using this groundwater.
- Additional cleanup will address the manufactured gas impacts to soil and groundwater.

Q: What are the findings of the 2008 sampling work?

A: An EPA-approved laboratory analyzed the soil and water samples. The data were compared to numerical tables used by the Illinois Site Remediation Program to set the objectives needed to make sure a site is safe to use. For this stage of the project, we used the Tier 1 table as a screening tool to indicate where remedial action (cleanup) may be needed. This table contains the IEPA's most conservative cleanup objectives. We wanted to know if the level of a chemical compound in the sample exceeded the level in the table for that compound.

The results indicate that there are limited impacted areas on residential properties to the north, west and south and commercial properties to the east of the site. The highest levels of contamination are more than 10 feet below ground. The investigation findings are summarized on the attached site drawing.

The groundwater below and near the site has been sampled on a regular schedule since 1996. The May 2008 round detected impacts that exceed a potable (suitable for personal use) standard in 10 monitoring wells, most of them on the site.

Q: What are the next steps in the Champaign MGP site environmental project?

A: The Ameren Illinois Utilities' goal for this former industrial site is to restore it to meet the state's environmental objectives.

Mid-2008 - The next step will be for the Ameren Illinois Utilities to submit to the Illinois EPA for review the Updated Site Investigation Report, which includes the results of the recent off-site investigation activities. Once the IEPA has reviewed and approved the Site Investigation Report, the Ameren Illinois Utilities and PSC will prepare a Remedial Objectives Report. This document describes the goals that remedial actions will need to meet to make sure the site is safe to use and protects the environment and public health over the long term.

Late 2008/Early 2009 - Once the Illinois EPA accepts the remedial objectives, the Ameren Illinois Utilities will submit a Remedial Action Plan for review. Some of the remedial activities that will be considered as we develop the plan are removing impacted soil, treating it to contain it below ground and installing a protective cover, such as asphalt or clean soil. If major excavations are necessary, the Ameren Illinois Utilities would perform some of this work under the protection of a temporary tent-like structure. The plan will take into account the continued nonresidential use of the property and is likely to consist of a combination of actions.

Q: Does Ameren have any experience in dealing with manufactured gas plant sites?

A: Yes. We have completed successful studies and cleanups of manufactured gas plant sites in at least 20 locations in Illinois and Missouri.

Q: How may people in the community ask questions and offer opinions about this project?

A: The Ameren Illinois Utilities are committed to open communication with those interested in the project. 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 at 504 E. Grove Street. The telephone number of the library is 217-403-2090. Library hours are Monday – Thursday 10:00 a.m. until 8:00 p.m., Friday 10:00 a.m. until 6:00 p.m., Saturday 10:00 a.m. until 4:00 p.m.

Documents have also been placed at the Champaign City Building, located at 102 N. Neil Street, which is open from 8:00 a.m. to 5:00 p.m. on weekdays, unless otherwise posted. The report and fact sheets may be reviewed at the Information Desk located in the Atrium Lobby. If you have questions or the desk is temporarily un-staffed you may inquire at the Neighborhood Service Department in the same building or call 217-403-7070.

Information about the project can also be found on Ameren's web site at http://www.ameren.com/Environment/ADC_ChampaignMPGRemediationProject.asp.

Additional inquiries about the project can be made by calling Mr. Leigh Morris with the Ameren Illinois Utilities at 217-535-5228 or by e-mail at lmorris@ameren.com. His mailing address is Public Relations, Ameren Illinois Utilities, 200 W. Washington St., Springfield IL 62701.

Inquires regarding Illinois EPA's oversight of this project can be made by contacting Stan Black at 217-785-1427 or by e-mail at stan.black@illinois.gov. His mailing address is Office of Community Relations, Illinois Environmental Protection Agency, PO Box 19276, Springfield, IL 62794-9276.

MGP-Related Tier 1 Exceedances by Depth

