

**Project Status Report  
Champaign Former MGP Site  
308 N. 5<sup>th</sup> Street  
Champaign, Illinois  
State ID 0190100008**

March 2013

Prepared for:

**AMEREN ILLINOIS COMPANY**

St. Louis, Missouri



Columbia, Illinois



*Providing Tomorrow's Solutions Today.™*

**Project Status Report  
Champaign Former MGP Site  
308 N. 5th Street  
Champaign, Illinois  
State ID 0190100008**

March 2013

Prepared for:

**AMEREN ILLINOIS COMPANY**  
St. Louis, Missouri

**PSC INDUSTRIAL OUTSOURCING, LP**  
210 West Sand Bank Road  
Post Office Box 230  
Columbia, Illinois 62236-0230

Project 624-0908-0120

**TABLE OF CONTENTS**

---

		<u>Page</u>
<b>Executive Summary .....</b>		<b>iv</b>
<b>1</b>	<b>INTRODUCTION.....</b>	<b>1</b>
1.1	Site Information .....	1
1.2	Legal Description .....	2
1.3	Site History.....	2
1.3.1	Recognized Environmental Concerns .....	3
1.4	Site Setting .....	3
1.4.1	Regional Setting .....	3
1.4.2	Site Topography .....	4
1.4.3	Subsurface Geology .....	4
1.4.4	Site Hydrogeology .....	5
<b>2</b>	<b>EXTENT OF SUBSURFACE IMPACT.....</b>	<b>7</b>
2.1	Tier 1 Evaluation.....	7
2.1.1	Soil Ingestion Exposure Route.....	7
2.1.2	Soil Inhalation Exposure Route .....	7
2.1.3	Indoor Inhalation Exposure Route .....	7
2.1.4	Soil Component to Groundwater Ingestion Exposure Route .....	8
2.1.5	Groundwater Ingestion Exposure Route .....	8
<b>3</b>	<b>REMEDIATION OBJECTIVES.....</b>	<b>9</b>
<b>4</b>	<b>REMEDIAL ACTIONS.....</b>	<b>10</b>
4.1	Site Remediation Phases 1 through 9.....	10
4.2	Tent Structure.....	11
4.3	Soil Removal and Backfilling Activities.....	11
4.4	Perimeter Excavations.....	12
4.5	Ambient Air Monitoring .....	12
4.6	Wastewater Treatment .....	13
4.7	Confirmation Soil Sampling .....	13
4.7.1	Remediation Phases 1 through 9.....	13
4.7.2	Perimeter Areas 1 through 6 .....	15
4.8	In-Situ Chemical Oxidation (ISCO) Pilot Study.....	15
4.8.1	Pilot Study Analytical Results .....	16
4.8.2	ISCO Application to Excavation Floors .....	17
4.9	Groundwater Monitoring Well Abandonment, Installation, and Field Hydraulic Conductivity Testing.....	17
4.9.1	Groundwater Monitoring Well Abandonment and Installation .....	17
4.9.2	Field Hydraulic Conductivity Testing.....	19
<b>5</b>	<b>Confirmation Sample Analytical Results.....</b>	<b>21</b>

## TABLE OF CONTENTS

---

	<u>Page</u>
5.1	Phases 1 through 9 Analytical Results .....21
5.1.1	Confirmation Wall Samples .....21
5.1.2	Confirmation Floor Samples .....22
5.2	Perimeter Excavation Analytical Results .....22
5.3	Evaluation for Soil Attenuation .....23
5.4	Groundwater .....24
<b>6</b>	<b>Tier 2 evaluations .....25</b>
<b>7</b>	<b>Additional remedial actions .....26</b>
<b>8</b>	<b>EFFECTIVENESS ON ADDRESSING IMPACT .....27</b>
<b>9</b>	<b>SUMMARY AND CONCLUSIONS .....28</b>
<b>10</b>	<b>ILLINOIS LICENSED PROFESSIONAL ENGINEER REVIEW .....29</b>
<b>References</b>	
<b>List of Tables</b>	
<b>List of Figures</b>	
<b>APPENDIX A</b>	<b>Wastewater Laboratory Analytical Datasheets</b>
<b>APPENDIX B</b>	<b>Soil Sample Laboratory Analytical Datasheets - Backfill</b>
<b>APPENDIX C</b>	<b>Analytical Results of ISCO Pilot Study</b>
<b>APPENDIX D</b>	<b>Well Construction and Well Abandonment Forms</b>
<b>APPENDIX E</b>	<b>Field Hydraulic Conductivity Testing Datasheets</b>
<b>APPENDIX F</b>	<b>Soil Sample Laboratory Analytical Datasheets – Remedial Action Confirmation Samples</b>
<b>APPENDIX G</b>	<b>Soil Sample Laboratory Analytical Datasheets – Remedial Action Perimeter Samples</b>

## Executive Summary

PSC Industrial Outsourcing, LP (PSC) is submitting this *Project Status Report* on behalf of Ameren Illinois Company (Ameren Illinois) for the former Champaign Manufactured Gas Plant (MGP) site located at 308 N. 5<sup>th</sup> Street in Champaign, Illinois. This property, referred to as the “site” from this point forward, is currently enrolled in the Illinois Environmental Protection Agency (IEPA) Site Remediation Program (SRP) to address residual constituents from a former MGP and has been assigned LPC #0190100008.

Numerous site investigations and remedial activities were performed at the site dating back to 1986 that identified recognized environmental concerns. This Project Status Report will include information about on-site subsurface impact and remedial activities only. Off-site subsurface impact will be addressed in separate documents. A comprehensive site investigation was performed and the extent of impact was evaluated and presented in the *Comprehensive Site Investigation Report* (CSIR) dated December 2007. The extent of subsurface impact was delineated and constituents of concern (COC) were identified on-site that exceed Tiered Approach to Corrective Action Objectives (TACO) Tier 1 Remedial Objectives (RO), non-TACO or provisional ROs, or Groundwater Quality Standards (IAC Section 620). The remedial objectives and approach to address the subsurface impact were presented in the *Remedial Objectives Report* (ROR) and *Remedial Action Plan* (RAP) dated December 2008. An Addendum to the ROR dated September 1, 2010 was submitted and approved by the IEPA. Addendums to the RAP dated September 23, 2010 and June 1, 2011 were also submitted and approved by the IEPA.

The most recent remedial activities were completed at the site between June 2009 and September 2011. Impacted soil within the remediation site boundaries were excavated approximately 16 to 28 feet (ft) below ground surface (bgs) as shown on Figure ES-1. The soil excavation was completed within a temporary tent structure, approximately 40 meters by 65 meters in size, to minimize dust and odors in the surrounding area. Due to the size of the property, the remediation was completed in nine individual phases and the tent structure was relocated for each phase. The site perimeter areas that were not excavated beneath the tent structure were also removed as an open-air excavation following the nine remedial phases.

The results of each remediation phase and perimeter excavations were compiled to determine the effectiveness of the remedial actions for the site as a whole. Soil confirmation samples collected around the site perimeter contained exceedances of Tier 1 ROs following the remediation activities to depths up to 20 feet bgs; therefore, In-Situ Chemical Oxidation (ISCO) treatment will be completed on-site to address the perimeter exceedances.

This document was prepared to present to the IEPA a summary of the remedial actions that have been completed to date. A Remedial Action Completion Report (RACR) will be submitted to the IEPA following the ISCO injections. The RACR will provide analytical results from confirmation samples collected following the ISCO treatment, details of exposure pathway exclusions, and any special conditions that may be required to achieve the approved remediation objectives. At that time, Ameren Illinois will request a No Further Remediation (NFR) determination for the site at 308 N. 5<sup>th</sup> Street.

# 1 INTRODUCTION

---

On behalf of Ameren Illinois Company (Ameren Illinois), PSC Industrial Outsourcing, LP (PSC) has prepared this *Project Status Report* for the former Manufactured Gas Plant (MGP) located at 308 N. 5<sup>th</sup> Street in Champaign, Illinois (Figure 1-1). The investigation and remediation activities conducted at this property were part of the overall activities to address the release of MGP-related constituents from former MGP operations. This Project Status Report will include information about on-site subsurface impact and remedial activities only. Off-site subsurface impact will be addressed in separate documents.

The property, referred to as the “site” from this point forward, is currently enrolled in the Illinois Environmental Protection Agency (IEPA) Site Remediation Program (SRP) and has been assigned LPC #0190100008. The site consists of a vacant lot on which the former MGP operated. Subsurface impact was identified during site investigation activities that were performed as part of Ameren Illinois’ evaluation of the former MGP operations.

The site investigation activities have been summarized in the *Comprehensive Site Investigation Report* (CSIR), PSC 2007. To outline the approach for addressing the impact, PSC prepared a *Remedial Objectives Report* (ROR) and a *Remedial Action Plan* (RAP) both dated December 2008. An Addendum to the ROR dated September 1, 2010 and Addendums to the RAP dated September 23, 2010 and June 1, 2011, respectively, were also submitted and approved by the IEPA.

Impact to soil and groundwater was identified during site investigation activities at levels that exceeded Tier 1 ROs. Ameren Illinois has addressed the majority of the impact through soil excavation and disposal. This Project Status Report is being submitted to document the remedial actions that have been completed to date. An additional remedial action consisting of In-Situ Chemical Oxidation (ISCO) is proposed to address soil impact that remains around the site perimeter. A Remedial Action Completion Report (RACR) will be submitted at a future date which will include details of the ISCO treatment and results.

## 1.1 Site Information

The site is zoned as commercial property and consists of a vacant lot approximately 2.4 acres in size at 308 N. 5<sup>th</sup> Street in Champaign, Illinois. The site is located in the northeast quarter of the southwest quarter of Section 7, Township 19 North, Range 9 East of the Third Principal Meridian. The site is identified on Figure 1-2.

A railroad right-of-way (Norfolk-Southern) borders the site to the north and several residential properties are located north of the active track. The Sixth Street right-of-way is adjacent to the east; however, Sixth Street is abandoned between the railroad right-of-way and the alley south of the site. During remedial activities, the eastern portion of the site was extended to encompass the abandoned portion of the Sixth Street right-of-way to effectively address the subsurface impact in that area. Other property east of the Sixth Street right-of-way is zoned commercial and consists of

vacant land and parking lots. Residential properties to the south are separated from the site by a chain link fence and an alleyway. Fifth Street borders the site to the west and separates the site from residential properties. The surrounding neighborhood is anticipated to remain zoned as residential and light-commercial. The future use of the site is uncertain at this time, but Ameren Illinois intends to restrict the site to commercial property use.

## **1.2 Legal Description**

The legal description for the Champaign remediation site is as follows:

Part of the SW ¼, of Sec. 7 T.19N. R.9E. of the 3<sup>rd</sup>. PM., City of Champaign, Champaign County, Illinois, more particularly described as follows:

Lots 7, 8, 9, 10, 11, and 12 in block 29 (except railroad right-of-way) of Seminary Addition to Urbana, now a part of the City of Champaign lying south of the railroad right-of-way;

And lots 1, 2, and 3 in block 31 of Seminary Addition to Urbana, now a part of the City of Champaign;

And a strip of land 66 feet in width known as vacated Hill Street lying between blocks 29 and 31;

And lots 1, 2, and 3 of Assessor's Plat of subdivision of lot 8 in M.W. Busey's subdivision of south part of lot 1 of the south west quarter of Section 1, Township 19 North, Range 9 East of the third principal meridian, and lots 4, 5 and 6 in block 31 of Seminary Addition to Urbana, now a part of the City of Champaign, as per plat recorded in deed record 35 page 66;

All situated in the City of Champaign, County of Champaign and the State of Illinois.

## **1.3 Site History**

The following information relative to MGP history is summarized from Sanborn Fire Insurance Maps (Sanborn Maps), Brown's Directory of American Gas Companies (Brown's Directories), Ameren Illinois files, and other historical documents.

Historical information indicates that gas was manufactured on the site as early as 1869 and continued through 1933. Gas was produced by coal carbonization, oil gasification, and carbureted water gas methods during various periods of operation. After operations ceased, the plant was maintained for stand-by production purposes until about 1955. Plant facilities were demolished between 1955 and 1960, with the exception of the booster house, which was demolished in December 2008. Although the property remained vacant, Illinois Power, a predecessor of Ameren Illinois,

maintained ownership of the property until 1979 when it was sold to the American Legion. Illinois Power repurchased the property from the American Legion in 1991 after preliminary environmental investigations indicated the presence of MGP related impacts at the site. The site is currently owned by Ameren Illinois.

Past site features included the former gas plant and associated buildings, three tar wells, two gas holders (GH-1 and GH-2) and two oil tanks located on the northern portion of the site. The former booster house, a third gas holder (GH-3) three purifiers, and seven oil tanks were located on the southern portion of the site. Historical site features are illustrated in Figure 1-3.

### **1.3.1 Recognized Environmental Concerns**

The analytical data set collected during the investigation activities were compared to the IEPA Tier 1 RO values, non-TACO or provisional ROs, Groundwater Quality Standards, and accepted background levels as an initial screening. Based on this evaluation, the exposure routes of concern were:

- The soil ingestion route for residential, industrial/commercial and construction worker scenarios;
- The soil inhalation route for residential, industrial/commercial and construction worker scenarios;
- The soil component to groundwater ingestion route; and
- The groundwater ingestion route.

Constituents of concern (COC) identified during site investigation activities are listed in Table 1-1.

## **1.4 Site Setting**

The following sections provide a brief description of the site setting to include the physiographic setting, the site topography, the regional geology, and the site-specific subsurface hydrogeology. A more detailed description of the site setting was presented in the CSIR.

### **1.4.1 Regional Setting**

Champaign County in Illinois is situated within the Bloomington Ridge Plain in the Till Plains section of the Central Lowland Physiographic Province. The landscape is characterized by widely spaced continental glacial moraines with nearly featureless ground moraine plains. The geology beneath Champaign County has been summarized as 100 to 400 feet (ft) of Wisconsinan, Illinoian,



and Kansan glacial drift deposited on Paleozoic bedrock which dips eastward and southward toward the Illinois Basin.

The Illinois American Water Company (IAWC) supplies water from water wells located in the west well field located about three miles west of the site. These wells average about 310 feet in total depth and have between 50 and 100 feet of screen. The wells in the west field produce water from the Mahomet Sand Member. IAWC also has water wells in the north well field located about 1.0 mile northeast of the site. These wells average about 210 feet in depth with screens ranging from 10 to 50 feet in length. The wells produce water from the middle sand and gravel aquifer in the Glasford Formation.

### **1.4.2 Site Topography**

The site is mostly flat with isolated sloped areas along the east side where Sixth Street was formerly located. The property drainage is generally toward the northeast. No surface bodies of water are present on the site. The nearest surface water is Boneyard Creek located approximately 1,000 feet southwest of the site.

### **1.4.3 Subsurface Geology**

The major geologic units present at the site; in descending order, are the surficial fill layer, the weathered till unit (Wedron), the unweathered till unit (Wedron), and the lower silty sand member of the Glasford Formation. A brief description of each unit is described further in this section. Additional detail on the subsurface geology of the site can be found in the CSIR.

The surficial fill layer is typically three to four feet thick and covers the entire site. The fill consists of gravelly silt and sand, with cinders, bricks, and debris. Much of the fill was placed on the site after demolition of the MGP facilities.

The first natural subsurface material encountered is a weathered till unit. The unit is continuous beneath the site and is believed to be part of the Batestown Till Member of the Wisconsin Wedron Formation. The Weathered Till Unit was contacted at various depths beneath the site. The unit averages 10 to 15 feet thick beneath the site. The Weathered Till Unit is comprised of brown to gray silty clay with some oxidation evident along clay fractures.

The Unweathered Till Unit is also believed to be part of the Batestown Till Member of the Wisconsin Wedron Formation. The unit is generally differentiated from the Weathered Till Unit by the gray color and lack of weathering along fractures. The Unweathered Till was encountered at depths ranging from 9 to 20.5 feet Below Ground Surface (BGS).

Three deep boreholes drilled during the Phase 2 investigation encountered thick sand, silty sand, and gravel units at depths below 100 feet. These deeper deposits are believed to be the upper units of the Illinoian Glasford Formation.

#### **1.4.4 Site Hydrogeology**

The following paragraphs provide a brief description of the groundwater bearing units and the groundwater flow conditions at the site. The groundwater bearing units consist of shallow, intermediate, and deep systems. A more detailed description of the site hydrogeology is presented in the CSIR.

The shallow groundwater system at the site is an unconfined water-bearing zone with the saturation depth (water table) found in the surficial fill layer or the uppermost till unit. Shallow groundwater is monitored by a network of nineteen wells located on and around the remediation site. Groundwater in the shallow system beneath most of the study area generally flows in a somewhat radial pattern from the site. Depth to the shallow groundwater system typically ranges from 3 to 10 feet bgs.

Slug testing was performed on five of the shallow groundwater monitoring wells in June of 2011. The hydraulic conductivity results of the June 2011 testing ranged from a low of  $2.6 \times 10^{-6}$  cm/sec at well UMW-109 to a high of  $9.6 \times 10^{-5}$  cm/sec at well UMW-107, with a geometric mean value for all five wells of  $3.1 \times 10^{-5}$  cm/sec. The shallow groundwater meets the IEPA definition of Class II groundwater. Additional information regarding the slug testing performed at the site is included in Section 4.9 of this report.

The intermediate groundwater system is monitored by a network of nine wells located on and around the remediation site. Depth to the intermediate groundwater system typically ranges from 27 to 31 feet bgs. Slug testing was performed in four of the eight intermediate wells (UMW-301, UMW-302, UMW-303, and UMW-304) during the off-site investigation in 2008. The horizontal hydraulic conductivity values ranged from  $2.80 \times 10^{-2}$  centimeters per second to  $8.63 \times 10^{-2}$  centimeters per second. The mean hydraulic conductivity calculated using data from the four wells was  $4.85 \times 10^{-2}$  centimeters per second or 137.5 feet per day. The intermediate groundwater meets the IEPA definition of Class I groundwater. Groundwater generally flows in a southeast direction.

The deepest groundwater system that has been monitored at the site is a sand and gravel zone within the Lower Glasford Formation beginning at a depth of about 151 feet bgs to a depth greater than 177 feet bgs. The sand and gravel layers encountered in this zone were much thicker and laterally continuous than the silty sand and sand units encountered in the weathered and unweathered till units. The water levels for the three wells screened in this

zone stabilized at depths of approximately 120 feet bgs. The regional gradient is the west-southwest. The deep groundwater monitoring wells were monitored from 1992 to 1998 and were abandoned in 1999.

## **2 EXTENT OF SUBSURFACE IMPACT**

---

The following subsections present a summary of the extent of impact identified onsite during the investigation activities conducted in 2004 and 2008, prior to the remediation activities.

### **2.1 Tier 1 Evaluation**

The analytical results from soil and groundwater samples were compared to the Tier 1 ROs set forth in IAC Section 742 and the non-TACO ROs published by the IEPA for all potential exposure routes and property use scenarios. The comparison of the investigation data established an approximate extent of subsurface impact for the site, which is discussed in the following sections. Figure 2-1 illustrates the horizontal extent of impact as determined through site investigation activities.

#### **2.1.1 Soil Ingestion Exposure Route**

Exceedances for the soil ingestion exposure route were identified at locations covering the extent of the site. The most significant levels of impact on-site were present within the former Hill Street right-of-way in areas of underground piping and on the northern portion of the site in the proximity of the former gas holders and tar structures. Fifteen COCs were identified at concentrations that exceeded the Tier 1 ROs for this exposure route. The COCs included twelve organic constituents and three inorganic constituents. Exceedances of the soil ingestion exposure route were present in surface soils (0 to 3 ft bgs), shallow subsurface soils (3 to 10 ft bgs), and deep subsurface soils (greater than 10 ft bgs) for residential, industrial/commercial, and construction worker property use scenarios.

#### **2.1.2 Soil Inhalation Exposure Route**

The laboratory analytical results for each constituent were compared to the Tier 1 ROs for the soil inhalation exposure route for residential, industrial/commercial, and construction worker property use scenarios. Seven COCs were identified at concentrations that exceed the Tier 1 ROs for this exposure pathway. The COCs included benzene, ethylbenzene, toluene, xylene, naphthalene, styrene, and mercury. Exceedances were identified for each of the potential property use scenarios.

#### **2.1.3 Indoor Inhalation Exposure Route**

All four BTEX constituents, naphthalene, styrene, and 2-methylnaphthalene were identified as COCs for the indoor inhalation exposure route for residential and industrial/commercial property use scenarios. Exceedances were identified at multiple locations across the site.

#### **2.1.4 Soil Component to Groundwater Ingestion Exposure Route**

Twenty-one organic constituents and four inorganic constituents were identified as COCs that exceeded the Tier 1 ROs for the soil component of groundwater ingestion route. The impact extended across the entire site in all depth intervals with the most significant impact in deep subsurface soils.

#### **2.1.5 Groundwater Ingestion Exposure Route**

Groundwater has been monitored at the site on a quarterly basis since 1999. Analytical results from the samples collected during the quarterly events were compared to Class I groundwater standards. Based on the comparison, twenty COCs were identified in groundwater. The COCs included benzene, ethylbenzene, toluene, twelve Polynuclear Aromatic Hydrocarbons (PNAs) constituents, iron, nickel, manganese, lead, and cyanide.

### **3 REMEDIATION OBJECTIVES**

---

A Remedial Objectives Report (ROR) for the site was developed and submitted to the IEPA in December of 2008. The ROR was developed based upon the premise that shallow groundwater would prevent excavation of impacted soil at depths greater than 10 feet bgs. Therefore, the original ROR proposed excavating to 10 feet bgs and utilizing ISCO to address remaining soil impact at depths greater than 10 feet. Soil impact that could not be excavated or remediated through ISCO techniques would be addressed through institutional controls and/or engineered barriers. Ameren Illinois elected to use the most stringent Tier 1 ROs for soil ingestion and inhalation or the IEPA accepted background levels for metropolitan statistical areas as the project remediation objectives. The project remedial objectives are presented on Table 3-1.

Following the initiation of field activities, it was determined that groundwater could easily be controlled. Groundwater entering the excavation was pumped into on-site storage tanks, which allowed the excavation to proceed to depths of approximately 16 to 28 feet bgs while still maintaining dry working conditions. Therefore, the excavation areas were dug to the maximum extent achievable within the limits of the equipment and personnel safety. An Addendum to the ROR was submitted in September of 2010 to include deeper excavation of up to 28 feet bgs and the use of ISCO and/or Tier 2 evaluations to address remaining impacted soil. The extent of the remedial action excavation is depicted in Figure 3-1.

## **4 REMEDIAL ACTIONS**

---

The following sections provide a summary of the remedial activities performed for the site during 2009 through 2011. A summary of investigations and remedial actions conducted prior to 2009 was provided in the CSIR.

Beginning in early May 2009, Ameren Illinois met with the community leaders to discuss the upcoming project and address any concerns or questions. Preparations and project initiation began in mid May 2009 and included but was not limited to the following:

- conducting a property boundary survey;
- providing notifications and fact sheets to members of the neighborhood, the community, and the city;
- re-locating overhead utilities;
- constructing a temporary tent structure over the remediation area;
- establishing an operational and support area for the remediation activities;
- establishing exclusion areas to limit access for remediation areas to remediation personnel only;
- contacting utility locating services and identifying buried utilities; and
- initiating an ambient air monitoring program.

Excavation of impacted soil began on the Ameren Illinois property on June 24, 2009.

### **4.1 Site Remediation Phases 1 through 9**

Remedial activities progressed in nine phases, each of which were completed beneath an enclosed tent structure, approximately 40 meters by 65 meters in size. The locations of each phase are illustrated on Figure 4-1. Each phase was treated as a separate excavation; therefore the excavation depths and extents varied depending upon soil conditions and tent positioning. Figure 3-1 illustrates the excavation extents.

An on-site field geologist provided sampling and oversight of the soil removal activities throughout the remedial actions. A grid system was utilized for sampling during each phase that followed the orientation of the tent. The geologist monitored the subsurface conditions and directed the remediation site supervisor as to the limits of the excavation. The on-site geologist made observations, documented the field activities, and directed additional over-excavation to remove material as identified from the analytical results of confirmation samples. Daily field notes, measurements, and photo documentation were taken and are kept within the project files at the PSC Columbia, Illinois office.

The PSC project manager and Ameren Illinois project manager made periodic inspections of the site and the remedial activities to provide additional direction as necessary to the on-site geologist and remediation site supervisor.

## **4.2 Tent Structure**

The tent structure was approximately 65 meters by 40 meters in size and utilized four 20,000 cubic feet per minute (cfm) carbon filter air-handling units. The air handling units were used in association with the temporary tent structure to contain emissions for the work completed within the structure. The air handling units were configured to pull air from the interior of the tent through activated carbon beds prior to discharging the air into the atmosphere. The air units created a slight negative pressure within the tent structure, which maintained acceptable air quality while work proceeded within the structure and controlled the release of dust and volatile site emissions to the surrounding community.

The tent structure also consisted of two to four truck doors (depending on the phase being excavated and the positioning of the tent on the site) and two personnel doors. Soil excavation, loading, and backfilling during each of the nine remediation phases were performed within the temporary tent structure. The doors remained closed unless trucks were entering or exiting the tent to retain the negative air pressure within the tent.

Upon completion of a remedial phase, the tent was moved to the next location in one piece using a customized dolly system, or in multiple pieces by crane.

## **4.3 Soil Removal and Backfilling Activities**

Soil was excavated until no visual impact was observed or to the maximum extent achievable while maintaining safe working conditions. A total of approximately 187,000 tons of soil was excavated from the site. The excavation depths ranged on average from 20 to 25 feet deep. A ten-foot perimeter was maintained around the interior of the tent walls to maintain structure stability. A Caterpillar 330 and a Caterpillar 321C excavator were used for soil removal. The soil was loaded directly into 39-foot, 70 cubic yard capacity, semi-dump trailers. Trucks entered the tent structure one at a time for loading to minimize opening the doors and to maintain negative air pressure within the structure. Loaded trucks were covered and swept prior to leaving the tent structure. Excavated soil was transported by Mel Price Trucking Company to the Brickyard Landfill located in Danville, Illinois.

After soil removal activities were completed, the excavations were backfilled with clean fill material from an off-site source. Fill material consisted of either silty clay or CA-6. The silty clay was sampled and sent to a laboratory for analysis, and the results were submitted to the IEPA for approval. A copy of the sample results for the backfill are included in Appendix B. A total of approximately 170,000 tons of clean



backfill was placed onsite. Backfill was spread using a Caterpillar D4G bulldozer and compacted using a Caterpillar CP433E, sheep's-foot compactor, and a remote vibratory roller compactor. Bed ash was applied to the backfill material as necessary to obtain the correct moisture content for proper compaction. Compaction testing was conducted throughout the backfill process of each excavation prior to moving to the next remediation phase.

During the excavation of the southern portion of Phase 1, a tar structure was encountered near the southeast corner of the tent. The tar structure was located in an area of underground piping between former gas holder GH-3 and the booster house. The contents of the structure appeared to be source material. The contents of the tar structure were removed, blended with bed ash and soil, and loaded into semi-dump trucks to be transported to a hazardous waste landfill operated by Waste Management, Inc. in Emelle, Alabama. Approximately 334.66 tons of material from the tar structure was sent to Emelle.

#### **4.4 Perimeter Excavations**

The utilization of the enclosed tent structure precluded excavating to the remediation site boundary; therefore following the completion of the nine phases of excavation using the tent structure, excavation of the site perimeter (approximately 10-25 feet in width) was completed. The perimeter excavations were separated into six areas that included the entire northern and western boundaries and a portion of the southern and eastern boundaries as shown in Figure 4-1. The tent structure was not necessary for the shallow perimeter soil excavations as confirmed by continuous air quality monitoring; therefore, the perimeter excavation areas were conducted in "open air." The perimeter excavations were completed to a depth of three feet bgs, with the exception of Area 2 located in the area of the former oil tanks, which was excavated to a depth of 10 feet bgs. Figure 4-1 illustrates the perimeter excavation areas and sample locations.

The site geologist collected soil confirmation samples approximately every 25 linear feet from the exterior walls of the perimeter excavation areas. Soil confirmation samples were also collected from the excavation floor in perimeter Area 2. The perimeter excavations were closely monitored for air quality and odors, and were backfilled immediately following sample collection. Concover, a substance comprised of paper mulch and water, was sprayed into the excavations and on top of soil to control dust and odors as needed.

#### **4.5 Ambient Air Monitoring**

An ambient air monitoring program was initiated to provide protection for the remediation workers and the residences in the surrounding community. Ambient air monitoring was performed by PSC. A short summary is provided below.

Six perimeter air monitoring stations (AMS) identified as AMS-1 through AMS-6 were placed at intervals along the perimeter fence line at the locations. Time-integrated air samples were collected from the AMS every 72 hours and submitted to the laboratory for analysis. Samples were analyzed for BTEX using USEPA Methods TO-15, PNAs using USEPA Method TO-13A, and particulates (PM-10). PM10 sampling and analysis was performed in accordance with EPA Method 40 CFR, Part 50, Appendix M – “Reference Method for Determination of Particulate Matter as PM10 in the Atmosphere.”

Real-time ambient air monitoring was performed hourly at 25 locations around the perimeter of the site. Measured concentrations from a MiniRAE 3000<sup>®</sup> PID and a Dusttrak<sup>®</sup> II Aerosol Monitor were recorded on field data sheets.

Additional details and analytical results for the ambient air monitoring program are available in the *Remedial Action Ambient Air Monitoring Report* prepared by PSC and submitted under separate cover to the IEPA.

## **4.6 Wastewater Treatment**

Water that collected within the excavation was pumped into on-site storage tanks and treated prior to being discharged into the sanitary sewer line. The wastewater treatment system was permitted in accordance with IEPA and City of Champaign requirements and consisted of a series of storage/settling tanks, bag filters, activated carbon, oil/water separator, and associated piping. Samples of the treated water were collected and analyzed to ensure compliance with the discharge permit. After the wastewater analytical results confirmed permit compliance, the water was discharged in 20,000-gallon batches into the Urbana-Champaign Sanitary District sanitary sewer line. A total of approximately 1.9 million gallons of treated wastewater was discharged during the remedial actions. Wastewater analytical results are included in Appendix A.

## **4.7 Confirmation Soil Sampling**

### **4.7.1 Remediation Phases 1 through 9**

Soil confirmation samples were collected at regular intervals using a grid pattern. Samples were collected from the excavation walls at intervals of 25 feet. Each wall sample set consisted of three sample depths: 0 to 3 feet, 3 to 10 feet, and greater than 10 feet bgs. Excavation floor samples were collected every 50 feet according to the grid system. A total of approximately 374 samples were collected during the site remediation.

In addition to soil confirmation samples, the clay backfill was sampled and sent to a laboratory for analysis. The analytical results that were submitted to

the IEPA for approval prior to placement in the excavations are included in Appendix B.

Due to OSHA excavation safety regulations and for the safety of the geologist, the soil confirmation samples were collected directly from the excavator bucket. The geologist directed the excavator operator to the location of the samples and collected depth measurements for the sample locations. Each confirmation sample was observed for potential impact prior to being placed into sample jars. Field data was recorded on field data sheets.

Soil samples were collected and analyzed for BTEX, VOCs, PNAs, SVOCs, total cyanide, amenable cyanide, and RCRA metals. A percentage of soil samples were also analyzed for pH, Total Petroleum Hydrocarbons (TPH), PCBs, pesticides, and herbicides. Soil samples collected for VOCs analysis used USEPA Method 5035. A portion of the soil was retained using a sampling syringe provided by the laboratory. After collection of the sample, the soil was immediately ejected into 40-ml sample vials provided by the laboratory. Each 40-ml vial contained the appropriate quantity of preservative as pre-measured by the laboratory. Each jar was immediately sealed and placed in a cooler packed with ice.

Sampling procedures for PNAs, SVOCs, cyanide, and RCRA metals followed SW 846. Soil collected for sampling was placed in 8-ounce sample jars provided by the laboratory. Soil was placed in the jar with minimal disturbance. The laboratory was provided with sufficient quantities for analysis. Each jar was immediately sealed and placed in a cooler with ice. A sample summary for Phases 1 through 9 is presented in Table 4-1.

The field geologist used disposable, surgical gloves for handling all soil samples. To minimize the potential for cross-contamination, the gloves were discarded between sample locations.

Labels were affixed to each sample jar. Each sample was given a unique sample identification based on the remediation phase, sample location on the grid, floor or wall location, and sample depth. For example, P1-A1-W (3) represents a sample where "P1" represents the first remediation phase, "A1" represents grid location A1, "W" represents a sample collected from the excavation wall, and the (3) represents a depth of 3 feet bgs. The soil samples were submitted to Teklab and analyzed for VOCs using USEPA Method 8260, SVOCs using USEPA Method 8270, and PNAs using USEPA Method 8270 SIMS. The samples were also analyzed for inorganics using various USEPA Methods.

All confirmation soil sample results were compared to the project ROs established in the ROR and RAP. A discussion of the analytical results is presented in Section 5 of this report.

#### **4.7.2 Perimeter Areas 1 through 6**

Each perimeter area was evaluated based upon the analytical results from wall samples collected during Phases 1 through 9. The COCs for each perimeter area were identified and the soil samples collected were only analyzed for the identified COCs. Table 4-2 presents a summary of the analyses performed for the perimeter soil samples.

The field geologist collected soil samples approximately every 25 feet in the perimeter excavation areas. Each soil sample was placed into a jar provided by the laboratory and given a unique sample identification based upon the sample location and depth. For example, PA1-01 (3) represents a sample where “PA1” was Perimeter Area 1, “01” was the first sample collected from the area, and (3) was a depth of three feet bgs.

The soil samples were submitted to Teklab Inc. for analysis. The soil samples that were analyzed for VOCs used USEPA Method 8260, SVOCS used USEPA Method 8270, and PNAs used USEPA Method 8270 SIMS. Some samples were also analyzed for inorganics using various USEPA Methods. Samples were only analyzed for constituents that were found to exceed a Tier 1 RO in the confirmation wall samples collected during the nine remediation phases.

### **4.8 In-Situ Chemical Oxidation (ISCO) Pilot Study**

An ISCO pilot study was conducted on-site by XDD, from Quakertown in Pennsylvania, to determine the feasibility of treating impacted soil using in-situ chemical oxidation. Eighteen temporary injection wells composed of one-inch PVC were installed on the northwest corner of the site within a 30’ by 30’ grid, as illustrated on Figure 4-2. Nine of the wells were screened at a depth of 10 to 15 feet bgs and nine wells were screened at 17 to 27 feet bgs to correspond with the depths of impact identified during site investigation activities.

XDD selected an alkaline activated persulfate (AAP) solution for the pilot study. The AAP method involves the activation of a sodium persulfate oxidant by adjusting the pH of the aquifer to alkaline conditions. The activation of the persulfate results in the formation of an oxidant that is capable of reducing contaminants in-situ.

The pilot injection was completed on July 17, 2009. A total of approximately 8,763 gallons of alkaline activated persulfate solution was injected into the temporary wells on-site. Approximately 1,302 gallons were injected into the shallow wells and 7,461 gallons were injected into the deep wells. Some of the oxidant that was injected into the shallow wells came up onto the ground surface rather than spreading out beneath the surface as intended. Injections into the deeper wells appeared to have greater subsurface distribution than the shallow wells.

Two post-injection monitoring events were conducted on July 24, 2009 and August 6, 2009 to determine the reactivity of the injected oxidant. The pH and persulfate remained elevated in several wells during the first monitoring event. The persulfate was fully reacted during the second monitoring event.

Post-injection soil sampling was conducted following the ISCO injection to determine the effectiveness of the oxidant in on-site soils. The results of the sampling are discussed in the following paragraphs.

#### **4.8.1 Pilot Study Analytical Results**

Soil Essentials Company, from New Glarus in Wisconsin, was contracted to advance three probeholes using a Geoprobe outside the western tent wall (Phase 2) within the ISCO pilot study area. Of the 30 ft by 30 ft study area, approximately 12.5 feet were located outside of the tent structure. Soil Essentials advanced probeholes in the approximate vicinity of the original locations IW-PT-201, IW-PT-205, and IW-PT-207. The locations are illustrated on Figure 4-2. Two soil samples were collected from each probehole for comparison to samples collected prior to the ISCO injections. Mike Mullins of the IEPA Champaign Field Office was on-site to split samples for additional analysis.

The original sample IW-PT-201 (11.5-12.5 ft bgs) was collected on April 6, 2009 prior to the ISCO injections. The sample contained exceedances for three of the four BTEX compounds and seven PNA constituents. The post-ISCO sample collected by PSC on December 2nd at a depth of 12-12.5 ft bgs contained exceedances of two BTEX constituents and naphthalene. The IEPA split sample (collected from 11-12 ft bgs) contained exceedances of six PNA constituents.

The pre-ISCO sample IW-PT-201 (18-19 ft bgs) was collected on April 6, 2009. Benzene was the only constituent that exceeded Tier 1 ROs. The post-ISCO sample and IEPA split sample did not contain concentrations of any constituents that exceeded Tier 1 ROs.

Sample IW-PT-205 (12.5-13.5), collected on April 6, 2009 prior to the ISCO injections, contained exceedances for three of the four BTEX constituents and ten PNA constituents. Concentrations of two constituents, benzene and naphthalene, exceeded Tier 1 ROs in the post-ISCO sample. The IEPA split sample contained only one exceedance for naphthalene.

The pre-ISCO sample IW-PT-205 (17-18 ft bgs) and the post-ISCO sample IW-PT-205B (17-18 ft bgs) both contained benzene concentrations in

exceedance of Tier 1 ROs. The IEPA split sample was not analyzed for the BTEX constituents. No PNA exceedances were identified in either sample.

Pre-ISCO sample IW-PT-207 (13-14 ft bgs) contained concentrations of BTEX and ten PNA constituents that exceeded Tier 1 ROs. The post-ISCO sample IW-PT-207 (13-14 ft bgs) contained exceedances for the same ten PNA constituents as the pre-ISCO sample. Benzene and xylene concentrations also exceeded Tier 1 ROs.

The original sample IW-PT-207 (18.5-19.5 ft bgs) and the post-ISCO sample IW-PT-207B (18.5-19.5) contained a benzene concentration in exceedance of Tier 1 ROs. The benzene concentrations for both samples were identical.

The results of the pre- and post-ISCO soil samples indicated a reduction in the contaminants identified in site soils. Based on these results, the ISCO oxidants were used to treat the excavation floors in Phases 2, 3, and 4 to reduce the concentrations of contaminants in the soil that could not safely be excavated. The results of the pilot study are included in Appendix C.

#### **4.8.2 ISCO Application to Excavation Floors**

Following the completion of the ISCO pilot study, chemical oxidant was applied to excavation floors during remediation Phases 2, 3, and 4 as an additional remedial measure. The oxidant was intended to reduce potential impact remaining at depths below what could feasibly be excavated.

### **4.9 Groundwater Monitoring Well Abandonment, Installation, and Field Hydraulic Conductivity Testing**

Groundwater monitoring wells located within the remediation area were abandoned during excavation activities. Replacement wells were installed following the completion of remedial activities to evaluate the effectiveness of the remedial actions on groundwater impact. Two new wells and one replacement well were also installed to the southwest of the remediation site to delineate the cyanide impact in that area. Figure 4-3 illustrates the groundwater monitoring well locations.

Many of the monitoring wells from the 1990 field hydraulic conductivity testing were no longer in use; therefore, additional field hydraulic conductivity testing was completed in June 2011. The following paragraphs present details of the monitoring well abandonment, installation, and hydraulic conductivity testing activities that were performed on the site.

#### **4.9.1 Groundwater Monitoring Well Abandonment and Installation**

The following groundwater monitoring wells were removed during remedial activities: UMW-113, UMW-114, and UMW-115 located in the southern half

of the site; wells UMW-104 and UMW-110 located in the former 6<sup>th</sup> Street right-of-way which was included in the remediation site boundaries; and UMW-304 located near the center of the remediation site. Each monitoring well was abandoned according to the IEPA and Department of Health requirements. Copies of the well abandonment forms are included in Appendix D.

Three groundwater monitoring wells were installed to the west of the site between February 2-3, 2010. Monitoring well UMW-106R was installed along the 5th Street right-of-way to replace UMW-106 that was removed during a water main replacement conducted by the City of Champaign in 2009. Monitoring well UMW-123 was also installed within the 5<sup>th</sup> Street right-of-way south of Hill Street. Monitoring well UMW-122 was installed between UMW-106R and UMW-123 in the alley south of Hill Street. Each of the three new monitoring wells were installed to monitor shallow groundwater and provide further delineation of the extent of cyanide impacts in groundwater southwest of the site. These wells have been included in the quarterly groundwater monitoring program.

Seven new monitoring wells, installed on-site during June and July 2012, were sampled for the first time in September 2012. The four new shallow monitoring wells, designated UMW-124 through UMW-127, were installed to depths between 15 and 16 feet below grade. The three new intermediate monitoring wells, designated UMW-301R, UMW-304R, and UMW-308, were installed to depths between 45 and 47 feet below grade. These seven new wells were installed to replace and supplement four shallow and two intermediate depth monitoring wells that were removed as a result of on-site remedial activities.

The wells were constructed of two-inch diameter PVC well screens and risers, with well screen slot size of 0.010 inches and ten feet in length. The annular space was backfilled with sand pack to two feet above the top of the screen. A bentonite seal was placed above the sand pack. Each well was completed with a flush mount well protector.

The new groundwater monitoring wells were installed by Terra Drill Inc., of Dupon, Illinois. Terra Drill utilized a truck mounted drill rig (CME-75) equipped with hollow stemmed 4.25 inch diameter augers to advance the soil borings and set the monitoring wells. A 6-inch diameter threaded schedule 40 PVC protective casing was installed in the intermediate well locations to prevent any potential soil impact from below the excavation backfill from entering the intermediate depth groundwater zone. The casing was grouted in place from the ground surface to immediately below the surface casing bottom.

The shallow depth monitoring wells were constructed using a 5 foot, two-inch diameter schedule 40 PVC riser, with 10-foot screens. Clean silica sand was installed in the annular space to approximately two feet above the top of the well screen. A bentonite seal was installed above the sand pack, and the wells were finished with flush-mount well protectors.

The intermediate depth monitoring wells were constructed within the ground surface casing using two inch diameter schedule 40 PVC riser, with 10 foot screens. The sand pack extended to two feet above the sand pack, followed by a bentonite seal, and flush-mount well protector similar to the shallow depth wells.

Each well was developed following installation. Development consisted of purging five well casing volumes or until the field measurements of pH, specific conductivity, temperature, and dissolved oxygen stabilize. The wells installed in June-July 2012 were sampled for the first time during the third quarter of 2012.

#### **4.9.2 Field Hydraulic Conductivity Testing**

Initial field hydraulic conductivity testing was performed on the shallow geologic materials on-site during the Phase II Site Investigation by Burlington Environmental, Inc. in 1990. The tests resulted in an overall mean hydraulic conductivity of  $1.6 \times 10^{-4}$  centimeters per second (cm/sec). Since the original hydraulic conductivity tests were performed in 1990 and only two of the original shallow monitoring wells tested at that time were still in existence in 2011, additional field permeability testing was conducted in June 2011. In-situ permeability tests were performed on five monitoring wells – UMW-102, UMW-107, UMW-108, UMW-109, and UMW-116.

The monitoring wells were tested by the variable head (“slug”) test method. The test methods utilized were modifications of the slug test method described by Cooper et al. (1967), whereby a solid slug is lowered or raised into the saturated portion of the well column, and measuring the resulting change in water level with time. The slug tests at the site were conducted using two, three, and four foot long by 1-1/4 inch diameter PVC slugs with rope and recorded using Aquistar PT2X Smart Sensors (PT2X) with 15 and 50 pounds per square inch (psi) transducers. In most cases, multiple tests were performed on each well because of the variability inherent in groundwater level recoveries when a slug is inserted versus removed from a well and to provide corroborating data. The field data collected and downloaded from the PT2X sensors is provided in Appendix E.

A laptop computer was used to download the data from the dataloggers and analyze the data with the use of AQTESOLV™ for Windows (Version 4.50.002), an aquifer test analysis software package by HYDROSOLVE.



Two analytical solutions were utilized on the data: the Bouwer-Rice method (1976) for unconfined aquifers and the KGS Model with Skin for unconfined aquifers (Hyder et al., 1994). The AQTESOLV™ output data sheets are included in Appendix E.

The results from both the 1990 and 2011 field permeability testing of the uppermost (shallow) wells at the site are provided in Appendix E. The hydraulic conductivity results of the June 2011 testing of the five shallow wells ranged from a low of  $2.6 \times 10^{-6}$  cm/sec at well UMW-109 to a high of  $9.6 \times 10^{-5}$  cm/sec at well UMW-107, with a geometric mean value for all five wells of  $3.1 \times 10^{-5}$  cm/sec. The overall geometric mean hydraulic conductivity for the June 2011 tests is very comparable to the geometric mean of the 1990 tests. The hydraulic conductivity testing indicates the groundwater within the uppermost geologic materials in the vicinity of the site unconditionally meet the definition of Class II – General Resource Groundwater for the purposes of establishing Tier 1 remediation objectives. Therefore, groundwater analytical evaluations in subsequent sections of this report are based upon comparison to Tier 1 groundwater remediation objectives for Class II groundwater.

The results of the field hydraulic conductivity testing were submitted to the IEPA in a report titled *Groundwater Monitoring Update – Quarter 2 2011 Sampling Event and Shallow Groundwater Classification Field Hydraulic Conductivity Testing*. In a letter dated August 30, 2011, the IEPA approved the report and the classification of shallow groundwater as Class II. The intermediate aquifer is still classified as a Class I aquifer.

## **5 CONFIRMATION SAMPLE ANALYTICAL RESULTS**

---

The following sections present an evaluation of the analytical results of the soil confirmation samples collected from the excavation walls and floors, including the samples collected from beneath the tent structure and those collected from the open air perimeter excavations.

Soil confirmation samples were compared to Tier 1 ROs presented in the ROR and RAP. The Tier 1 comparison revealed impact at concentrations greater than Tier 1 ROs in samples collected from excavation floors and walls. Soil analytical results are presented in Tables 5-1 through 5-12.

### **5.1 Phases 1 through 9 Analytical Results**

Samples were collected from excavation floors and walls during each of the nine phases and were given unique sample identification numbers for each phase. The sample analytical results are presented in Tables 5-1 through 5-8. The laboratory analytical reports are included in Appendix F. A discussion of the analytical results for the confirmation wall and floor samples is presented below.

#### **5.1.1 Confirmation Wall Samples**

Confirmation wall samples with COC concentrations in exceedance of Tier 1 ROs were identified along the 5<sup>th</sup> Street boundary, in the area formerly containing the retorts, purifying room, condensing room, and piping. Confirmation wall samples collected along the northern property boundary, in the location of coal storage areas along the railroad right-of-way, were also found to contain COCs above Tier 1 ROs. The area along the southern property boundary that formerly contained oil tanks was also identified to contain COCs at concentrations above Tier 1 ROs in the wall samples collected in that area. Confirmation wall samples found to exceed one or more Tier 1 ROs are shown in Figures 5-1 through 5-3. Analytical results for the confirmation wall samples are found in Tables 5-1 through 5-4.

The areas with the highest levels of soil impact are located in the northwest corner of the site. Soil impact was identified in wall samples along the western boundary from approximately Hill Street, north to the property boundary. Field observations along the western property boundary were consistent with impact typically associated with former MGP operations. Soil impact also remained along the northern property boundary. Field observations of the soils along the railroad right-of-way indicated the presence of railroad ties and a creosote-like substance and odor, especially within the 0 to 3 foot depth interval.

### 5.1.2 Confirmation Floor Samples

Soil impact in exceedance of Tier 1 ROs was identified in excavation floor samples as shown on Figure 5-3. The highest impact was identified in the Phase 2 excavation, which was in the area of the former gas holders. Sample P2-D4-F (22) had a benzene concentration of 133 mg/kg and a naphthalene concentration of 223 mg/kg. All of the BTEX constituents were identified to exceed one or more Tier 1 RO, in addition to six PNA constituents. Analytical results for the confirmation floor samples are found in Tables 5-5 through 5-8.

## 5.2 Perimeter Excavation Analytical Results

The perimeter excavations were separated into six areas as presented in Figure 4-1. The analytical results are found in Tables 5-9 through 5-12 and Appendix G. Seven wall samples at a depth of three feet bgs were collected from perimeter Area 1, located near the center of the southern property boundary. Three samples contained exceedances of one or more PNA constituent. Methylene chloride was detected above Tier 1 ROs in one wall sample in Area 1. Three wall samples contained mercury concentrations in exceedance of the construction worker inhalation exposure pathway and two samples identified arsenic above residential and commercial ingestion Tier 1 ROs.

Perimeter Area 2 was located in the southwest corner of the site. Twelve soil samples were collected from the excavation area, including ten from the walls and two from the floors. Two of the twelve soil samples collected from Area 2 contained concentrations of COCs above Tier 1 ROs. Sample PA2-01B (3) collected at 3 ft bgs from the excavation wall had mercury that exceeded the construction worker inhalation and soil component of groundwater ingestion exposure pathways. Sample PA2-01A (10) collected at 10 ft bgs from the excavation floor had a methylene chloride concentration in exceedance of the soil component of the groundwater ingestion exposure pathway.

Perimeter Area 3 consisted of the majority of the western property boundary. Twelve confirmation samples were collected from the excavation wall. Five of the twelve samples were identified to exceed one or more Tier 1 RO. Sample PA3-05(3) was located in the former Hill Street right-of-way. One exceedance of the residential ingestion exposure pathway for benzo(b)fluoranthene was identified in the sample. The remaining four samples were located on the northwestern portion of the site boundary. Two of the four samples contained exceedances for benzene and all four contained exceedances of at least four PNA constituents.

Perimeter Area 4 consisted of a portion of the northern property boundary. Seven soil confirmation samples were collected from the excavation wall. All seven of the Area 4 samples were identified to exceed one or more Tier 1 RO. Five or more PNA constituents were identified to exceed Tier 1 ROs in each of the seven wall samples.

Five samples were also identified to have benzene exceedances and two had total xylene exceedances. Carbazole, dibenzofuran, and 2-methylnaphthalene were also identified to exceed Tier 1 ROs in Area 4 soil samples.

Perimeter Area 5 consisted of the majority of the northern property boundary. Fourteen soil confirmation samples were collected from the excavation wall. Ten of the fourteen samples were identified to exceed one or more Tier 1 RO. Five samples contained exceedances of at least one BTEX constituent and five or more PNA constituents. 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, methylene chloride, 2-methylnaphthalene, dibenzofuran, mercury, and naphthalene in exceedance of Tier 1 ROs were also identified in Area 5 soil samples. The highest levels of impact that were above Tier 1 ROs were identified in samples PA5-12 (3) and PA5-13 (3).

Perimeter Area 6 consisted of the northeast corner of the property which was formerly the 6<sup>th</sup> Street right-of-way. Four soil confirmation samples were collected from the excavation wall in Perimeter Area 6, two of which were identified to exceed one or more Tier 1 RO. Samples PA6-2 (3) and PA6-3 (3) had concentrations of at least four PNA constituents above Tier 1 ROs. PA6-3 (3) also contained an arsenic exceedance above the Tier 1 ROs for residential and commercial ingestion and soil component of groundwater ingestion.

### 5.3 Evaluation for Soil Attenuation

Soil samples collected from the excavation floors during each of the nine remediation phases were evaluated for soil attenuation. The sum of the organic compounds was calculated for each sample that included the full list of VOCs, SVOCs, and PNAs. To be conservative, 50% of the detection limit was used for constituents that were not detected. Soil samples were also analyzed for TPH (OA-2) using method 3550B/8015B for diesel, kerosene, mineral spirits, and motor oil. The sum of the organic compounds and TPH were compared to the site specific fraction organic carbon content ( $f_{oc}$ ) of 10,400 mg/kg for the greater than 10 foot depth interval. The comparison is presented in Table 5-13.

The sum of organic compounds calculated for soil confirmation sample P2-D4-F (22) was 16,911.42 mg/kg, which exceeded the site specific  $f_{oc}$  value. The total TPH for the sample was 3,359 mg/kg which is below the site specific  $f_{oc}$  value. This location will be addressed using ISCO injections at a minimum depth of 22 feet, and will be re-evaluated following the completion of the injection process.

The total organic compounds and TPH for soil confirmation sample P4-A1-W (20) were 73,138 mg/kg and 14,690 mg/kg, respectively. Both values exceeded the site specific  $f_{oc}$  value. Soil confirmation sample P4-A1-W (20) is located within the area proposed for ISCO treatment; therefore, this location will be addressed using ISCO and will be re-evaluated following the completion of the injection process.

Three soil confirmation samples collected from Perimeter Area 5 were also analyzed for TPH. One sample, PA5-08 (3), had a TPH result of 33, 535 mg/kg. The TPH value was in exceedance of the site specific  $f_{oc}$  value of 23, 200 mg/kg for the 0 to 3 foot depth interval. Perimeter Area 5 is also located within the proposed ISCO treatment area, and will be re-evaluated following the completion of the ISCO activities.

## 5.4 Groundwater

Groundwater at the site is monitored by a network of 28 monitoring wells, including nineteen shallow and nine intermediate depth wells. Four of the 28 monitoring wells sampled in the fourth quarter of 2012 had at least one MGP-related constituent exceeding Class I or II standards. Shallow well UMW-107 had benzene and cyanide concentrations in exceedance of Class II groundwater standards. Two new on-site shallow wells, UMW-124 and UMW-125, also exceeded the Class II standard for benzene. Intermediate depth well UMW-302 had benzene and naphthalene concentrations in exceedance of Class I groundwater standards. None of the remaining 15 shallow or 8 intermediate depth monitoring wells that were sampled had an exceedance of cyanide, BTEX or PNA compounds in the September 2012 event. A copy of the analytical results from the December 2012 groundwater monitoring event is included on Table 5-14.

Shallow well UMW-107 had a benzene concentration of 0.1850 mg/L in December 2012 versus a Class II groundwater standard of 0.025 mg/L. The new on-site shallow wells (UMW-124 and UMW-125) had benzene concentrations of 0.085 mg/L and 0.0299 mg/L, respectively. The long term trend in benzene concentration at well UMW-107 has been downward; however, periodic increases such as those observed in the first two quarters of 2012 are expected based on fluctuating groundwater levels.

One other well with an organic constituent exceeding groundwater standards during the December 2012 event was well UMW-302. Well UMW-302 had benzene and naphthalene concentrations of 0.385 and 4.2 mg/L, respectively. The other intermediate depth wells located downgradient of this well - UMW-305, UMW-306, and UMW-307 - have not had any exceedances in the seventeen quarterly monitoring events since first installed and monitored in mid-2008. In addition, none of the three new intermediate depth wells installed on-site in June and July 2012 (UMW-301R, UMW-302, and UMW-308), had an exceedance of any Class I standards. To address the groundwater impact in the area of UMW-302, ISCO injections will be applied onsite along the southern property boundary. The injections will be applied at depths of approximately 36 to 44 feet bgs in order to contact the intermediate groundwater system and potentially reduce constituent concentrations in monitoring well UMW-302.

## **6 TIER 2 EVALUATIONS**

---

The confirmation soil sample analytical results indicated that soil impact above Tier 1 ROs has remained on-site following the excavation and disposal of impacted soils. An additional remedial action consisting of ISCO injections remains to be implemented. Once ISCO has been completed, confirmation soil samples will be collected and their analytical results will be compared to Tier 1 ROs. If there are constituents with Tier 1 RO exceedances in the soil confirmation samples, site-specific input parameters will be used to establish Tier 2 remedial objectives. Once the Tier 2 ROs have been calculated for the constituents remaining above Tier 1 ROs, the soil confirmation sample results would then be compared to the Tier 2 ROs for exceedances. After the Tier 2 RO evaluations are completed, any constituents with remaining Tier 2 RO exceedances will be addressed through institutional controls and/or engineered barriers.

## **7 ADDITIONAL REMEDIAL ACTIONS**

---

Soil impact to a depth of 10 to 28 feet that could feasibly be excavated from the site was completed during the nine tent phases and the open air excavations. Soil confirmation samples collected from excavation walls around the site perimeter indicates impact remains on-site in exceedance of Tier 1 ROs. A remedial approach consisting of ISCO injections will be applied to reduce the concentrations in soils that remain on-site. ISCO will be performed in areas shown on Figure 7-1, to reduce soil contaminant concentrations in those areas. A system of ISCO injection points will be installed and a chemical oxidant will be injected into the impacted areas to reduce or eliminate the remaining impact. Soil samples will be collected following the ISCO injections to determine the effectiveness of the chemical oxidant on the remaining soil impact. The details of the ISCO treatment and soil analytical results will be discussed in a RACR which will be submitted separately at a future date.

## **8 EFFECTIVENESS ON ADDRESSING IMPACT**

---

A total of approximately 187,000 tons of impacted soil was removed from the remediation site between June 2009 and September 2011. Impacted soil on the remediation site to a depth of approximately 16 to 28 feet was removed, with the exception of the soil around the perimeter of the site that was excavated to a depth of 3 to 10 feet bgs (Figure ES-1). Soil impact below the depths that could not feasibly be excavated remained in place.

Soil impact remaining in place within 10 feet of ground surface around the site perimeter, in addition to areas where contaminant concentrations exceed the attenuation of the soil, will be addressed using ISCO injections to potentially reduce the impact in those areas.

Exceedances of the Tier 1 ROs for the soil component of groundwater ingestion exposure route were identified in soil confirmation samples collected from the excavation floors. Exceedances of the soil component of groundwater ingestion exposure route in samples collected from the excavation floors will be addressed through monitoring and institutional controls. Groundwater is currently monitored with a network of 28 monitoring wells located on and around the remediation site, and will continue to be monitored following the completion of the remedial actions for a period of two years.



## 9 SUMMARY AND CONCLUSIONS

---

Soil and groundwater impact was identified on the site at 308 North 5<sup>th</sup> Street as a result of the former MGP operations on the property. Recognized environmental concerns were identified during previous activities performed at the site dating back to 1986. The extent of impact was evaluated and presented in the *Comprehensive Site Investigation Report* dated December 2007. The soil impact was present at levels that exceeded the Tier 1 ROs for all potential soil exposure routes and property use scenarios. Groundwater impact was also identified to exceed Class I and Class II groundwater standards.

Remedial actions were initiated in June 2009 to remove the impacted material from the site. Approximately 187,000 tons of impacted soil was removed and the excavations were backfilled with clean fill material from an offsite source. Soil confirmation sample results indicate that soil impact remains in place in portions of the site.

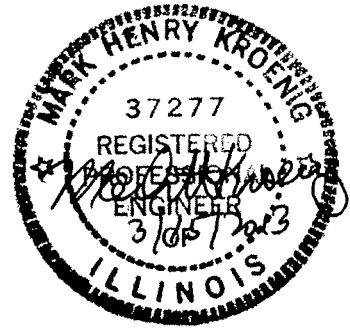
ISCO will be performed within the upper 10 feet of soil around the site perimeter, which is shown in areas on Figure 7-1, to reduce constituent concentrations in those areas. ISCO will also be performed at depths greater than 10 feet in areas where constituent concentrations exceed soil attenuation. A system of temporary ISCO injection wells will be installed and a chemical oxidant will be injected into the impacted areas to potentially reduce or eliminate the remaining impact. Soil samples will be collected following the ISCO injections to determine the effectiveness of the chemical oxidant on the remaining soil impact. The details of the ISCO treatment and soil analytical results will be discussed in a RACR which will be submitted separately at a future date.

Post-remedial action groundwater monitoring was included as part of the approved RAP dated December 2008. The post-remedial action groundwater monitoring is designed to evaluate the effectiveness of the remedial actions on subsurface impact. Groundwater sampling will be performed for two years following the completion of ISCO treatment and collection of soil confirmation samples.

## 10 ILLINOIS LICENSED PROFESSIONAL ENGINEER REVIEW

The work performed at the Champaign property to date was completed before I assumed responsibility for site activities. However:

I have reviewed documentation of the prior investigation activities and believe the data is suitable for compliance with the Act, 35 Ill. Adm. Code 740, and generally accepted engineering practices. I attest that to the best of my knowledge and belief, the work described in this plan or report has been designed or completed in accordance with the Act, 35 Ill. Adm. Code 740, and the information presented is accurate and complete.



Signature: Mark H. Kroenig

Mark H. Kroenig, P.E.  
Licensed Professional Engineer

Date: 3/15/2013

License No. 37277

License Expiration Date: 11/30/2013

## References

---

- John Mathes and Associates, 1990. *Phase IC Preliminary On-Site Assessment, Champaign Former Manufactured Gas Plant Site, Champaign, Illinois.*
- Philip Services Corporation. December 2007. *Comprehensive Site Investigation Report for AmerenIP Champaign Former Manufactured Gas Plant, State ID 0190100008.*
- PSC Industrial Outsourcing, LP. December 2008. *Remedial Objectives Report; Former Manufactured Gas Plant; Champaign, Illinois.*
- PSC Industrial Outsourcing, LP. December 2008. *Remedial Action Plan; Former Manufactured Gas Plant; Champaign, Illinois.*
- PSC Industrial Outsourcing, LP. September 1, 2010. *Revised Remedial Objectives Report (ROR); Former Manufactured Gas Plant; Champaign, IL; State ID 0190100008*
- PSC Industrial Outsourcing, LP. September 23, 2010. *Revised Remedial Action Plan (RAP); Former Manufactured Gas Plant; Champaign, IL; State ID 0190100008.*
- PSC Industrial Outsourcing, LP. June 1, 2011. *Remedial Action Plan (RAP) Addendum; Former Manufactured Gas Plant; Champaign, IL; State ID 0190100008.*
- PSC Industrial Outsourcing, LP. 2012. *Groundwater Monitoring Update – Quarter 4, 2012 Sampling Event, Champaign Former MGP Site, Champaign, Illinois.*

## List of Tables

<b>Table Number</b>	<b>Table Name</b>
1-1	List of Constituents of Concern
3-1	Project Remedial Objectives
4-1	Confirmation Soil Sample Summary – Phases 1 through 9
4-2	Perimeter Soil Sample Summary
5-1	Soil Confirmation Sample Analytical Results For Excavation Wall - BTEX and PNAs
5-2	Soil Confirmation Sample Analytical Results For Excavation Wall - VOCs
5-3	Soil Confirmation Sample Analytical Results For Excavation Wall - SVOCs
5-4	Soil Confirmation Sample Analytical Results For Excavation Wall - Inorganics
5-5	Soil Confirmation Sample Analytical Results For Excavation Floor - BTEX and PNAs
5-6	Soil Confirmation Sample Analytical Results For Excavation Floor - VOCs
5-7	Soil Confirmation Sample Analytical Results For Excavation Floor - SVOCs
5-8	Soil Confirmation Sample Analytical Results For Excavation Floor - Inorganics
5-9	Perimeter Soil Sample Analytical Results – BTEX and PNAs
5-10	Perimeter Soil Sample Analytical Results – VOCs
5-11	Perimeter Soil Sample Analytical Results – SVOCs
5-12	Perimeter Soil Sample Analytical Results – Inorganics
5-13	Evaluation for Soil Attenuation
5-14	Groundwater Analytical Results – December 2012

TABLE 1-1  
MANUFACTURED GAS PLANT RELATED CONSTITUENTS OF CONCERN  
PROJECT STATUS REPORT  
CHAMPAIGN FORMER MGP SITE  
AMEREN ILLINOIS

**SOIL**

**Inorganics**

Cyanide

**Metals**

Chromium

Lead

Arsenic

Mercury

**Volatile Aromatics**

Benzene

Ethylbenzene

Toluene

Total Xylenes

Styrene

Acetone

Methylene Chloride

**Polynuclear Aromatic Hydrocarbons**

Acenaphthene

Acenaphthylene

Benzo(a)anthracene

Benzo(a)pyrene

Benzo(b)fluoranthene

Benzo(k)fluoranthene

Chrysene

Dibenzo (a,h,)anthracene

Dibenzofuran

Fluorene

Indeno(1,2,3,cd)pyrene

Naphthalene

Phenanthrene

2-methylnaphthalene

**GROUNDWATER**

**Inorganics**

Cyanide

**Metals**

Iron

Lead

Nickel

Manganese

**Volatile Aromatics**

Benzene

Ethylbenzene

Toluene

**Polynuclear Aromatic Hydrocarbons**

Acenaphthene

Acenaphthylene

Benzo(a)anthracene

Benzo(a)pyrene

Benzo(b)fluoranthene

Chrysene

Fluoranthene

Fluorene

Naphthalene

Phenanthrene

Pyrene

2-methylnaphthalene

TABLE 3-1  
PROJECT REMEDIATION OBJECTIVES  
FOR CONSTITUENTS OF CONCERN  
CHAMPAIGN FORMER MGP SITE  
AMEREN ILLINOIS

	<b>Tier 1 Remediation Objective</b>									<b>Project Remediation Objective</b>
	<b><u>Ingestion</u></b>			<b><u>Inhalation</u></b>			<b><u>Indoor Inhalation</u></b>		<b>IEPA Accepted Background Levels</b>	
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	<b>MSA</b>	
<b><i>Volatile Organic Compounds (mg/kg)</i></b>										
Benzene	12	100	2,300	0.80	1.6	2.2	0.069	0.51	---	0.069
Ethylbenzene	7,800	200,000	20,000	400	400	58.0	130	130	---	58
Toluene	16,000	410,000	410,000	650	650	42.0	240	240	---	42
Total Xylenes	16,000	410,000	41,000	410	320	5.6	63	100	---	5.6
Styrene	16,000	410,000	41,000	1,500	1,500	430	230	230	---	230
Acetone	7,800	200,000	200,000	100,000	100,000	10,000	100,000	100,000	---	7,800
Methylene Chloride	85	760	12,000	13	24	34	1.4	10	---	1.4
<b><i>Semivolatile Organic Compounds (mg/kg)</i></b>										
Acenaphthene	4,700	120,000	120,000	---	---	---	---	---	0.13	4,700
Acenaphthylene	2,300 <sup>(1)</sup>	61,000 <sup>(1)</sup>	61,000 <sup>(1)</sup>	---	---	---	---	---	0.07	2,300
Benzo(a)anthracene	0.9	8	170	---	---	---	---	---	1.8	1.8
Benzo(a)pyrene	0.09	0.8	17	---	---	---	---	---	2.1	2.1
Benzo(b)fluoranthene	0.9	8	170	---	---	---	---	---	2.1	2.1
Benzo(k)fluoranthene	9	78	1,700	---	---	---	---	---	1.7	9
Chrysene	88	780	17,000	---	---	---	---	---	2.7	88
Dibenzo(a,h)anthracene	0.09	0.8	17	---	---	---	---	---	0.42	0.42
Dibenzofuran	310 <sup>(1)</sup>	8,200 <sup>(1)</sup>	820 <sup>(1)</sup>	---	---	---	---	---	---	310
Fluorene	3,100	82,000	82,000	---	---	---	---	---	0.18	3,100
Indeno(1,2,3-cd)pyrene	0.9	8	170	---	---	---	---	---	1.6	1.6
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	0.2	1.8
Phenanthrene	2,300 <sup>(1)</sup>	61,000 <sup>(1)</sup>	61,000 <sup>(1)</sup>	---	---	---	---	---	2.5	2,300
2-methylnaphthalene	2,300	61,000	61,000	---	---	---	83	83	0.14	83
<b><i>Metals (mg/kg)</i></b>										
Arsenic	13	13	61	750	1,200	25,000	---	---	13	13
Chromium	230	6,100	4,100	270	420	690	---	---	16.2	230
Lead	400	800	700	---	---	---	---	---	36	400
Mercury	23	610	61	10	16	0.1	0.45	0.45	0.06	0.1
<b><i>Inorganics (mg/kg)</i></b>										
Cyanide	1,600	41,000	4,100	---	---	---	---	---	0.51	1,600

Notes:

(1) Non-TACO or provisional RO provided by the IEPA

--- No remediation objective has been established by the IEPA for this constituent for exposure route

mg/kg Milligrams per kilogram

TABLE 4-1  
CONFIRMATION SAMPLE SUMMARY - PHASES 1 THROUGH 9  
CHAMPAIGN FORMER MGP SITE  
AMEREN ILLINOIS

Sample Identification	Date Collected	Teklab WO Number	BTEX (8260)	VOCs (8260)	PNA (8270 SIMS)	SVOCs (8270)	RCRA Metals	Total Cyanide (9012)	Amenable Cyanide (9012)	pH (9045)
P1-A1-W (0-3)	6/30/2009	9061174	X	X	X	X	X	X	X	
P1-A1-W (5-8)	6/30/2009	9061174	X	X	X	X	X	X	X	
P1-A1-W (12)	7/14/2009	9070651	X	X	X	X	X	X	X	
P1-A2-W (0-3)	6/30/2009	9061174	X	X	X	X	X	X	X	
P1-A2-W (5-6)	6/30/2009	9061174	X	X	X	X	X	X	X	
P1-A2-W (15)	7/6/2009	9070337	X	X	X	X	X	X	X	
P1-A3-W (3)	7/7/2009	9070337	X	X	X	X	X	X	X	
P1-A3-W (10)	7/7/2009	9070337	X	X	X	X	X	X	X	
P1-A3-W (20)	7/7/09	9070337	X	X	X	X	X	X	X	
P1-A4-W (3)	7/7/09	9070337	X	X	X	X	X	X	X	
P1-A4-W (8)	7/7/09	9070337	X	X	X	X	X	X	X	
P1-A4-W (20)	7/7/09	9070337	X	X	X	X	X	X	X	
P1-A5-W (3)	7/15/2009	9070651	X	X	X	X	X	X	X	
P1-A5-W (8)	7/15/2009	9070651	X	X	X	X	X	X	X	
P1-A5-W (20)	7/15/2009	9070651	X	X	X	X	X	X	X	
P1-B2-F (22)	7/1/2009	9070139	X	X	X	X	X	X	X	
P1-B2-F (24)	7/2/2009	9070139	X	X	X	X	X	X	X	
P1-B2-F (26)	7/16/2009	9070139	X	X	X	X	X	X	X	
P1-B2-F (28)	7/16/2009	9070650	X	X	X	X	X	X	X	
P1-B3.5-F (24)	7/16/2009	9070650	X	X	X	X	X	X	X	
P1-B3.5-F (26)	7/16/2009	9070650	X	X	X	X	X	X	X	
P1-B5-F (25)	7/15/2009	9070650	X	X	X	X	X	X	X	
P1-C5-F (22)	7/23/2009	9070886	X	X	X	X	X	X	X	
P1-D3.5-F (25)	7/30/2009	907112	X	X	X	X	X	X	X	
P1-D5-F (25)	7/30/2009	907112	X	X	X	X	X	X	X	
P1-F3.5-F (20.5)	7/31/2009	9071208	X	X	X	X	X	X	X	
P1-H1-F (20)	8/19/2009	9080744	X		X					
P1-F2-F (21)	9/9/2009	9090325	X	X	X	X	X	X	X	
P1-H3.5-F (20)	9/10/2009	9090415	X	X	X	X	X	X	X	
P1-H5-F (20.5)	9/10/2009	9090415	X	X	X	X	X	X	X	
P1-F5-F (20.5)	9/11/2009	9090415	X	X	X	X	X	X	X	

Notes:

- P1 Phase I Tent Location
- A1 Grid Sample Location
- W Wall Sample
- F Floor Sample
- (20) Sample Depth

TABLE 4-1  
CONFIRMATION SAMPLE SUMMARY - PHASES 1 THROUGH 9  
CHAMPAIGN FORMER MGP SITE  
AMEREN ILLINOIS

Sample Identification	Date Collected	Teklab WO Number	BTEX (8260)	VOCs (8260)	PNA (8270 SIMS)	SVOCs (8270)	RCRA Metals	Total Cyanide (9012)	Amenable Cyanide (9012)
P2-A1-W (3)	10/23/2009	9100991		X	X	X	X	X	X
P2-A1-W (8)	10/23/2009	9100991		X	X	X	X	X	X
P2-A1-W (20)	10/27/2009	9101186		X	X	X	X	X	X
P2-A2-W (3)	10/27/2009	9101186		X	X	X	X	X	X
P2-A2-W (8)	10/27/2009	9101186		X	X	X	X	X	X
P2-A2-W (20)	10/27/2009	9101186		X	X	X	X	X	X
P2-A3-W (3)	10/26/2009	9101045		X	X	X	X	X	X
P2-A3-W (8)	10/26/2009	9101045		X	X	X	X	X	X
P2-A3-W (20)	10/27/2009	9101186		X	X	X	X	X	X
P2-B1.5-F (22)	10/27/2009	9101186	X	X	X	X	X	X	X
P2-B2.5-F (22)	10/27/2009	9101186	X	X	X	X	X	X	X
P2-B4-F (22)	10/30/2009	9101273	X	X	X	X	X	X	X
P2-C4-F (22)	10/30/2009	9101273	X	X	X	X	X	X	X
P2-D2-F (22)	10/30/2009	9101273	X	X	X	X	X	X	X
P2-D4-F (22)	10/30/2009	9101273	X	X	X	X	X	X	X
P2-H1.5-F (24)	11/19/2009	9110900	X	X	X	X	X	X	X
P2-H3.5-F (24)	11/19/2009	9110900	X	X	X	X	X	X	X
P2-FG-1.5-F (28)	11/19/2009	9110900	X	X	X	X	X	X	X
P2-FG-3.5-F (24)	11/19/2009	9110900	X	X	X	X	X	X	X
P2-GH-F (17)	11/12/2009	9110535	X	X	X	X	X	X	X
P2-E2.5-F (24)	11/25/2009	9111063	X	X	X	X	X	X	X
P2-E4-F (24)	11/25/2009	9111063	X	X	X	X	X	X	X
P2-E4-F (30)	11/24/2009	9111063	X	X	X	X	X	X	X

Notes:

- P2 Phase 2 Tent Location
- A1 Grid Sample Location
- W Wall Sample
- F Floor Sample
- (20) Sample Depth



TABLE 4-1  
CONFIRMATION SAMPLE SUMMARY - PHASES 1 THROUGH 9  
CHAMPAIGN FORMER MGP SITE  
AMEREN ILLINOIS

Sample Identification	Date Collected	Teklab WO Number	VOCs (8260)	PNA (8270 SIMS)	SVOCs (8270)	RCRA Metals	Total Cyanide (9012)	Amenable Cyanide (9012)	TPH (OA-1, OA-2)	Pesticides/Herbicides	PCBs
P3-A1-W (3)	1/12/2010	10010865	X	X	X	X	X	X		X	X
P3-A1-W (10)	1/12/2010	10010865	X	X	X	X	X	X		X	X
P3-A1-W (15)	1/12/2010	10010865	X	X	X	X	X	X		X	X
P3-A2-W (8)	1/12/2010	10010865	X	X	X	X	X	X			X
P3-A2-W (16)	1/12/2010	10010865	X	X	X	X	X	X			X
P3-A3-W (3)	1/12/2010	10010865	X	X	X	X	X	X			X
P3-A3-W (6)	1/12/2010	10010865	X	X	X	X	X	X			X
P3-A3-W (18)	1/12/2010	10010865	X	X	X	X	X	X			X
P3-A4-W (3)	1/13/2010	10010865	X	X	X	X	X	X		X	X
P3-A4-W (10)	1/13/2010	10010865	X	X	X	X	X	X		X	X
P3-A4-W (15)	1/13/2010	10010865	X	X	X	X	X	X		X	X
P3-B2-F (22)	1/13/2010	10010398	X	X	X	X	X	X	X		X
P3-B2-F (24)	1/13/2010	10010398	X	X	X	X	X	X	X	X	X
P3-B4-F (22)	1/13/2010	10010398	X	X	X	X	X	X	X		X
P3-B4-F (24)	1/13/2010	10010398	X	X	X	X	X	X	X	X	X
P3-B.5-W (8)	1/14/2010	10010479	X	X	X	X	X	X			
P3-B.5-W (15)	1/14/2010	10010479	X	X	X	X	X	X			
P3-C1-W (10)	1/14/2010	10010865	X	X	X	X	X	X			X
P3-C1-W (18)	1/14/2010	10010865	X	X	X	X	X	X			X
P3-A.5-W (8)	1/20/2010	10010721	X	X	X	X	X	X			
P3-A.5-W (20)	1/20/2010	10010721	X	X	X	X	X	X			
P3-B-W (8)	1/20/2010	10010721	X	X	X	X	X	X			
P3-B-W (20)	1/20/2010	10010721	X	X	X	X	X	X			
P3-C.5-W (8)	1/20/2010	10010721	X	X	X	X	X	X			
P3-C.5-W (20)	1/20/2010	10010721	X	X	X	X	X	X			
P3-D-W (8)	1/20/2010	10010721	X	X	X	X	X	X			
P3-C3-F (22)	1/25/2010	10010891	X	X	X	X	X	X	X	X	X
P3-D2-F (22)	1/25/2010	10010891	X	X	X	X	X	X	X	X	X
P3-C2-F (24)	1/26/2010	10010891	X	X	X	X	X	X	X	X	X
P3-D2-F (24)	1/26/2010	10010891	X	X	X	X	X	X	X	X	X
P3-C3-F (24)	1/26/2010	10010891	X	X	X	X	X	X	X	X	X
P3-D.5-W (8)	1/27/2010	10010950	X	X	X	X	X	X			X
P3-D.5-W (20)	1/27/2010	10010950	X	X	X	X	X	X			X
P3-E-W (8)	1/27/2010	10010950	X	X	X	X	X	X			X
P3-E-W (20)	1/27/2010	10010950	X	X	X	X	X	X			X
P3-E.5-W (8)	1/27/2010	10010950	X	X	X	X	X	X			X

Notes:

- P3 Phase 3 Tent Location
- A1 Grid Sample Location
- W Wall Sample
- F Floor Sample
- (20) Sample Depth

TABLE 4-1  
CONFIRMATION SAMPLE SUMMARY - PHASES 1 THROUGH 9  
CHAMPAIGN FORMER MGP SITE  
AMEREN ILLINOIS

Sample Identification	Date Collected	Teklab WO Number	VOCs (8260)	PNA (8270 SIMS)	SVOCs (8270)	RCRA Metals	Total Cyanide (9012)	Amenable Cyanide (9012)	TPH (OA-1, OA-2)	Pesticides/Herbicides	PCBs
P3-E.5-W (20)	1/27/2010	10010950	X	X	X	X	X	X			X
P3-F-W (8)	1/27/2010	10010950	X	X	X	X	X	X		X	X
P3-F-W (20)	1/27/2010	10010950	X	X	X	X	X	X			X
P3-A1.5-W (8)	1/27/2010	10010950	X	X	X	X	X	X			X
P3-A1.5-W (20)	1/27/2010	10010950	X	X	X	X	X	X			X
P3-A2.5-W (3)	1/27/2010	10010950	X	X	X	X	X	X		X	X
P3-A2.5-W (8)	1/27/2010	10010950	X	X	X	X	X	X			X
P3-A2.5-W (20)	1/27/2010	10010950	X	X	X	X	X	X			X
P3-E3-F (24)	1/28/2010	10011007	X	X	X	X	X	X	X		X
P3-DE1.5-F (23)	1/29/2010	10011007	X	X	X	X	X	X	X		X
P3-DE1-F (23)	1/29/2010	10011007	X	X	X	X	X	X	X		X
P3-F2-F (23)	2/3/2010	10020250	X	X	X	X	X	X	X		X
P3-F2-F (25)	2/3/2010	10020250	X	X	X	X	X	X	X		X
P3-H1.5-F (23)	2/3/2010	10020250	X	X	X	X	X	X	X		X
P3-F.5-W (3)	2/3/2010	10020250	X	X	X	X	X	X		X	X
P3-F.5-W (8)	2/3/2010	10020250	X	X	X	X	X	X			X
P3-F.5-W (20)	2/3/2010	10020250	X	X	X	X	X	X			X
P3-G-W (3)	2/4/2010	10020301	X	X	X	X	X	X			X
P3-G-W (8)	2/4/2010	10020301	X	X	X	X	X	X			X
P3-G-W (20)	2/4/2010	10020301	X	X	X	X	X	X			X
P3-E3-F (25)	2/4/2010	10020301	X	X	X	X	X	X	X		X
P3-G.5-W (3)	2/4/2010	10020301	X	X	X	X	X	X		X	X
P3-G.5-W (8)	2/4/2010	10020301	X	X	X	X	X	X			X
P3-G.5-W (20)	2/4/2010	10020301	X	X	X	X	X	X			X
P3-H-W (3)	2/5/2010	10020311	X	X	X	X	X	X			X
P3-H-W (8)	2/5/2010	10020311	X	X	X	X	X	X			X
P3-H-W (20)	2/5/2010	10020311	X	X	X	X	X	X			X
P3-H.5-W (3)	2/5/2010	10020311	X	X	X	X	X	X		X	X
P3-H.5-W (8)	2/5/2010	10020311	X	X	X	X	X	X			X
P3-H.5-W (20)	2/5/2010	10020311	X	X	X	X	X	X			X

Notes:

- P3 Phase 3 Tent Location
- A1 Grid Sample Location
- W Wall Sample
- F Floor Sample
- (20) Sample Depth

TABLE 4-1  
CONFIRMATION SAMPLE SUMMARY - PHASES 1 THROUGH 9  
CHAMPAIGN FORMER MGP SITE  
AMEREN ILLINOIS

Sample Identification	Date Collected	Teklab WO Number	BTEX (8260)	VOCs (8260)	PNA (8270 SIMS)	SVOCs (8270)	RCRA Metals	Total Cyanide (9012)	Amenable Cyanide (9012)	TPH (OA-1, OA-2)	Pesticides/Herbicides	PCBs
P4-A5-W (3)	3/26/2010	10031028	X	X	X	X	X	X	X			
P4-A5-W (8)	3/26/2010	10031028	X	X	X	X	X	X	X			
P4-A4-W (3)	3/26/2010	10031028	X	X	X	X	X	X	X		X	X
P4-A4-W (8)	3/26/2010	10031028	X	X	X	X	X	X	X			
P4-A3-W (3)	3/29/2010	10031116	X	X	X	X	X	X	X			
P4-A3-W (8)	3/29/2010	10031116	X	X	X	X	X	X	X			
P4-A2-W (3)	3/29/2010	10031116	X	X	X	X	X	X	X		X	X
P4-A2-W (8)	3/29/2010	10031116	X	X	X	X	X	X	X			
P4-A1-W (3)	3/31/2010	10040092	X	X	X	X	X	X	X			
P4-A1-W (8)	3/31/2010	10040092	X	X	X	X	X	X	X			
P4-A1-W (20)	3/31/2010	10040092	X	X	X	X	X	X	X	X		
P4-A2-W (20)	3/31/2010	10040092	X	X	X	X	X	X	X	X		
P4-A3-W (20)	3/31/2010	10040092	X	X	X	X	X	X	X	X		
P4-A4-W (20)	3/31/2010	10040092	X	X	X	X	X	X	X	X		
P4-A5-W (20)	3/31/2010	10040092	X	X	X	X	X	X	X	X		
P4-B2-F (23)	4/2/2010	10040095	X	X	X	X	X	X	X	X		
P4-B3-F (23)	4/2/2010	10040095	X	X	X	X	X	X	X	X		
P4-BC4-F (23)	4/2/2010	10040095	X	X	X	X	X	X	X	X		
P4-B2-F (25)	4/7/2010	10040244	X									
P4-B3-F (25)	4/7/2010	10040244	X									
P4-BC4-F (25)	4/7/2010	10040244	X									
P4-D1.5-F (25)	4/12/2010	10040461	X	X	X	X	X	X	X	X		
P4-D3-F (25)	4/12/2010	10040461	X	X	X	X	X	X	X	X		
P4-D4.5-F (25)	4/12/2010	10040461	X	X	X	X	X	X	X	X		
P4-EF1.5-F (25)	4/12/2010	10040461	X	X	X	X	X	X	X	X		X
P4-EF3-F (25)	4/12/2010	10040461	X	X	X	X	X	X	X	X		X
P4-EF4.5-F (25)	4/12/2010	10040461	X	X	X	X	X	X	X	X		X
P4-B2-F (25)	4/7/2010	10040639		X	X	X	X	X	X	X		X
P4-B3-F (25)	4/7/2010	10040639		X	X	X	X	X	X	X		X
P4-BC4-F (25)	4/7/2010	10040639		X	X	X	X	X	X	X		X
P4-G4-F(24)	5/20/2010	10050902	X	X	X	X	X	X	X	X		X
P4-G4-F(26)	5/20/2010	10050902	X	X	X	X	X	X	X	X		X
P4-G3-F(24)	5/20/2010	10050902	X	X	X	X	X	X	X	X		X
P4-G3-F(26)	5/20/2010	10050902	X	X	X	X	X	X	X	X		X
P4-G2-F(24)	5/20/2010	10050902	X	X	X	X	X	X	X	X		X
P4-G2-F(26)	5/20/2010	10050902	X	X	X	X	X	X	X	X		X

Notes:

- P4 Phase 4 Tent Location
- A1 Grid Sample Location
- W Wall Sample
- F Floor Sample
- (20) Sample Depth

TABLE 4-1  
CONFIRMATION SAMPLE SUMMARY - PHASES 1 THROUGH 9  
CHAMPAIGN FORMER MGP SITE  
AMEREN ILLINOIS

Sample Identification	Date Collected	Teklab WO Number	VOCs (8260)	PNA (8270 SIMS)	SVOCs (8270)	RCRA Metals	Total Cyanide (9012)	Amenable Cyanide (9012)	TPH (OA-1, OA-2)	Pesticides/Herbicides	PCBs
P5-A5-W (3)	7/13/2010	10070526	X	X	X	X	X	X		X	X
P5-A5-W (8)	7/13/2010	10070526	X	X	X	X	X	X			
P5-A5-W (20)	7/15/2010	10070607	X	X	X	X	X	X			
P5-A4-W (3)	7/14/2010	10070526	X	X	X	X	X	X			
P5-A4-W (8)	7/14/2010	10070526	X	X	X	X	X	X			
P5-A4-W (20)	7/15/2010	10070607	X	X	X	X	X	X			
P5-A3-W (3)	7/14/2010	10070526	X	X	X	X	X	X		X	X
P5-A3-W (8)	7/14/2010	10070526	X	X	X	X	X	X			
P5-A3-W (20)	7/15/2010	10070607	X	X	X	X	X	X			
P5-B3.5-F (24)	7/15/2010	10070606	X	X	X	X	X	X	X		
P5-B3.5-F (26)	7/15/2010	10070606	X	X	X	X	X	X	X		
P5-B2-F (24)	7/16/2010	10070644	X	X	X	X	X	X	X		
P5-B2-F (26)	7/16/2010	10070644	X	X	X	X	X	X	X		
P5-D2-F (25)	7/27/2010	10071064	X	X	X	X	X	X	X		
P5-D4-F (25)	7/27/2010	10071064	X	X	X	X	X	X	X		
P5-GH4-F(22)	8/27/2010	10081177	X	X	X	X	X	X	X		
P5-F4-F(25)	8/30/2010	10081266	X	X	X	X	X	X	X		
P5-G2.5-E (22)	9/3/2010	10090178	X	X	X	X	X	X	X		

Notes:

- P5 Phase 5 Tent Location
- A1 Grid Sample Location
- W Wall Sample
- F Floor Sample
- (20) Sample Depth

TABLE 4-1  
CONFIRMATION SAMPLE SUMMARY - PHASES 1 THROUGH 9  
CHAMPAIGN FORMER MGP SITE  
AMEREN ILLINOIS

Sample Identification	Date Collected	Teklab WO Number	VOCs (8260)	PNA (8270 SIMS)	SVOCs (8270)	RCRA Metals	Total Cyanide (9012)	Amenable Cyanide (9012)	TPH (OA-1, OA-2)	Pesticides/Herbicides	PCBs
P6-A4.5-W (3)	10/12/2010	10100541	X	X	X	X	X	X		X	X
P6-A4.5-W (8)	10/12/2010	10100541	X	X	X	X	X	X			
P6-A4.5-W (20)	10/12/2010	10100541	X	X	X	X	X	X			
P6-A5.5-W (3)	10/12/2010	10100541	X	X	X	X	X	X			
P6-A5.5-W (8)	10/12/2010	10100541	X	X	X	X	X	X			
P6-B5.5-W (3)	10/13/2010	10100630	X	X	X	X	X	X		X	X
P6-B5.5-W (8)	10/13/2010	10100630	X	X	X	X	X	X			
P6-BC5.5-W (3)	10/13/2010	10100630	X	X	X	X	X	X			
P6-BC5.5-W (8)	10/13/2010	10100630	X	X	X	X	X	X			
P6-C5.5-W (3)	10/14/2010	10100630	X	X	X	X	X	X		X	X
P6-C5.5-W (8)	10/14/2010	10100630	X	X	X	X	X	X			
P6-A5.5-W (21)	10/14/2010	10100630	X	X	X	X	X	X			
P6-B5.5-W (20)	10/14/2010	10100630	X	X	X	X	X	X			
P6-B4.5-F (25)	10/15/2010	10100660	X	X	X	X	X	X	X		
P6-D3-F (25)	10/20/2010	10100831	X	X	X	X	X	X	X		
P6-D3-F (26)	10/20/2010	10100831	X	X	X	X	X	X	X		
P6-D4.5-F (25)	10/20/2010	10100831	X	X	X	X	X	X	X		
P6-D4.5-F (26)	10/20/2010	10100831	X	X	X	X	X	X	X		
P6-BC5.5-W (20)	10/15/2010	10100661	X	X	X	X	X	X			
P6-C5.5-W (20)	10/18/2010	10100792	X	X	X	X	X	X			
P6-CD5.5-W (3)	10/18/2010	10100792	X	X	X	X	X	X			
P6-CD5.5-W (8)	10/19/2010	10100792	X	X	X	X	X	X			
P6-CD5.5-W (20)	10/19/2010	10100792	X	X	X	X	X	X			
P6-D5.5-W (3)	10/19/2010	10100792	X	X	X	X	X	X			
P6-D5.5-W (8)	10/19/2010	10100792	X	X	X	X	X	X			
P6-D5.5-W (20)	10/20/2010	10100915	X	X	X	X	X	X			
P6-DE5.5-W (3)	10/20/2010	10100915	X	X	X	X	X	X		X	X
P6-DE5.5-W (8)	10/21/2010	10100915	X	X	X	X	X	X			
P6-DE5.5-W (20)	10/21/2010	10100915	X	X	X	X	X	X			
P6-E5.5-W (3)	10/21/2010	10100915	X	X	X	X	X	X			
P6-E5.5-W (8)	10/21/2010	10100915	X	X	X	X	X	X			
P6-E5.5-W (20)	10/21/2010	10100915	X	X	X	X	X	X			
P6-F4-F (19)	11/17/2010	10110864	X	X	X	X	X	X	X		
P6-H4.5-F (19)	11/17/2010	10110864	X	X	X	X	X	X	X		
P6-F5.5-W (3)	11/17/2010	10110865	X	X	X	X	X	X		X	X
P6-F5.5-W (8)	11/17/2010	10110865	X	X	X	X	X	X			
P6-F5.5-W (16)	11/17/2010	10110865	X	X	X	X	X	X			
P6-G5.5-W (3)	11/17/2010	10110865	X	X	X	X	X	X			
P6-G5.5-W (8)	11/17/2010	10110865	X	X	X	X	X	X			

Notes:

- P5 Phase 5 Tent Location
- A1 Grid Sample Location
- W Wall Sample
- F Floor Sample
- (20) Sample Depth

TABLE 4-1  
CONFIRMATION SAMPLE SUMMARY - PHASES 1 THROUGH 9  
CHAMPAIGN FORMER MGP SITE  
AMEREN ILLINOIS

Sample Identification	Date Collected	Teklab WO Number	VOCs (8260)	PNA (8270 SIMS)	SVOCs (8270)	RCRA Metals	Total Cyanide (9012)	Amenable Cyanide (9012)	TPH (OA-1, OA-2)	Pesticides/Herbicides	PCBs
P6-G5.5-W (16)	11/17/2010	10110865	X	X	X	X	X	X			
P6-H5.5-W (3)	11/18/2010	10110865	X	X	X	X	X	X		X	X
P6-H5.5-W (8)	11/18/2010	10110865	X	X	X	X	X	X			
P6-H5.5-W (16)	11/18/2010	10110865	X	X	X	X	X	X			
P6-HI4-W (3)	11/19/2010	10110915	X	X	X	X	X	X		X	X
P6-HI4-W (8)	11/19/2010	10110915	X	X	X	X	X	X			
P6-HI4-W (16)	11/19/2010	10110915	X	X	X	X	X	X			
P6-HI3-W (3)	11/22/2010	10111017	X	X	X	X	X	X			
P6-HI3-W (8)	11/22/2010	10111017	X	X	X	X	X	X			
P6-HI3-W (16)	11/22/2010	10111017	X	X	X	X	X	X			
P6-HI2-W (3)	11/23/2010	10111050	X	X	X	X	X	X		X	X
P6-HI2-W (8)	11/23/2010	10111050	X	X	X	X	X	X			
P6-HI2-W (16)	11/23/2010	10111050	X	X	X	X	X	X			
P6-HI1-W (3)	11/23/2010	10111050	X	X	X	X	X	X			
P6-HI1-W (8)	11/23/2010	10111050	X	X	X	X	X	X			
P6-HI1-W (16)	11/23/2010	10111050	X	X	X	X	X	X			
P6-H2-F (19)	11/23/2010	10111049	X	X	X	X	X	X	X		
P6-G3-F (19)	11/23/2010	10111049	X	X	X	X	X	X	X		

Notes:

- P6 Phase 6 Tent Location
- A1 Grid Sample Location
- W Wall Sample
- F Floor Sample
- (20) Sample Depth

TABLE 4-1  
CONFIRMATION SAMPLE SUMMARY - PHASES 1 THROUGH 9  
CHAMPAIGN FORMER MGP SITE  
AMEREN ILLINOIS

Sample Identification	Date Collected	TeKlab WO Number	VOCs (8260)	PNA (8270 SIMS)	SVOCs (8270)	RCRA Metals	Total Cyanide (9012)	Amenable Cyanide (9012)	TPH (OA-1, OA-2)	Pesticides/Herbicides	PCBs
P7-GH1-F (16)	1/7/2011	11010299	X	X	X	X	X	X	X		
P7-G2-F (20)	1/10/2011	11010299	X	X	X	X	X	X	X		
P7-G2-F (16)	1/11/2011	11010350	X	X	X	X	X	X	X		
P7-F1-F (16)	1/11/2011	11010350	X	X	X	X	X	X	X		
P7-F1-F (20)	1/11/2011	11010350	X	X	X	X	X	X	X		
P7-G1-SW (3)	1/12/2010	11010396	X	X	X	X	X	X	X		
P7-G1-SW (8)	1/12/2010	11010396	X	X	X	X	X	X	X		
P7-G1-SW (16)	1/12/2010	11010396	X	X	X	X	X	X	X		
P7-FG1-SW (3)	1/12/2010	11010396	X	X	X	X	X	X	X	X	
P7-FG1-SW (8)	1/12/2010	11010396	X	X	X	X	X	X	X		
P7-FG1-SW (16)	1/12/2010	11010396	X	X	X	X	X	X	X		
P7-F1-SW (3)	1/13/2011	11010475	X	X	X	X	X	X			X
P7-F1-SW (8)	1/13/2011	11010475	X	X	X	X	X	X			
P7-F1-SW (16)	1/13/2011	11010475	X	X	X	X	X	X			
P7-EF1-SW (3)	1/13/2011	11010475	X	X	X	X	X	X			
P7-EF1-SW (8)	1/13/2011	11010475	X	X	X	X	X	X			
P7-EF1-SW (16)	1/13/2011	11010475	X	X	X	X	X	X			
P7-E1-SW (3)	1/13/2011	11010475	X	X	X	X	X	X			X
P7-E1-SW (8)	1/13/2011	11010475	X	X	X	X	X	X			
P7-E1-SW (16)	1/13/2011	11010475	X	X	X	X	X	X			
P7-B1.5-F (20)	2/9/2011	11020342	X	X	X	X	X	X			X
P7-B1.5-F (22)	2/9/2011	11020342	X	X	X	X	X	X			X
P7-B3.5-F (25)	2/11/2011	11020438	X	X	X	X	X	X	X		
P7-B1-SW (3)	2/15/2011	11020563	X	X	X	X	X	X			
P7-B1-SW (8)	2/15/2011	11020563	X	X	X	X	X	X			
P7-B1-SW (22)	2/15/2011	11020563	X	X	X	X	X	X			
P7-BC1-SW (3)	2/15/2011	11020563	X	X	X	X	X	X		X	
P7-BC1-SW (8)	2/15/2011	11020563	X	X	X	X	X	X			
P7-BC1-SW (22)	2/15/2011	11020563	X	X	X	X	X	X			
P7-C1-SW(3)	2/15/2011	11020563	X	X	X	X	X	X			
P7-C1-SW(8)	2/15/2011	11020563	X	X	X	X	X	X			
P7-C1-SW(21)	2/15/2011	11020563	X	X	X	X	X	X			
P7-CD1-SW (3)	2/17/2011	11020709	X	X	X	X	X	X			X
P7-CD1-SW (8)	2/17/2011	11020709	X	X	X	X	X	X			
P7-CD1-SW (20)	2/17/2011	11020709	X	X	X	X	X	X			
P7-CD1-F (20)	2/17/2011	11020710	X	X	X	X	X	X	X		
P7-CD1-F (22)	2/17/2011	11020710	X	X	X	X	X	X	X		
P7-D1-W (3)	3/2/2011	11030152	X	X	X	X	X	X			
P7-DE1-W (3)	3/2/2011	11030152	X	X	X	X	X	X		X	X
P7-D1-W (8)	3/2/2011	11030152	X	X	X	X	X	X			
P7-DE1-W (8)	3/2/2011	11030152	X	X	X	X	X	X			
P7-D1-W (21)	3/2/2011	11030152	X	X	X	X	X	X			
P7-DE1-W (21)	3/2/2011	11030152	X	X	X	X	X	X			
P7-E1-F (23)	3/2/2011	11030151	X	X	X	X	X	X	X		
P7-E23-F (23)	3/2/2011	11030151	X	X	X	X	X	X	X		
P7-CD3-F (25)	2/24/2011	11020944	X	X	X	X	X	X	X		

Notes:

- P7 Phase 7 Tent Location
- A1 Grid Sample Location
- W Wall Sample
- F Floor Sample
- (20) Sample Depth

TABLE 4-1  
CONFIRMATION SAMPLE SUMMARY - PHASES 1 THROUGH 9  
CHAMPAIGN FORMER MGP SITE  
AMEREN ILLINOIS

Sample Identification	Date Collected	Teklab WO Number	VOCs (8260)	PNA (8270 SIMS)	SVOCs (8270)	RCRA Metals	Total Cyanide (9012)	Amenable Cyanide (9012)	TPH (OA-1, OA-2)	Pesticides/Herbicides	PCBs
P8-H4-W (3)	4/6/2011	11040237	X	X	X	X	X	X			
P8-H4-W (8)	4/6/2011	11040237	X	X	X	X	X	X			
P8-H3-W (3)	4/6/2011	11040237	X	X	X	X	X	X		X	X
P8-H3-W (8)	4/6/2011	11040237	X	X	X	X	X	X			
P8-H2-W (3)	4/6/2011	11040237	X	X	X	X	X	X			
P8-H2-W (8)	4/6/2011	11040237	X	X	X	X	X	X			
P8-H1-W (3)	4/6/2011	11040237	X	X	X	X	X	X			
P8-H1-W (8)	4/6/2011	11040237	X	X	X	X	X	X			
P8-G12-F (20)	4/7/2011	11040289	X	X	X	X	X	X	X		
P8-G12-F (22)	4/7/2011	11040289	X	X	X	X	X	X	X		
P8-G3-F (20)	4/7/2011	11040289	X	X	X	X	X	X	X		
P8-H1-W (19)	4/11/2011	11040503	X	X	X	X	X	X			
P8-H2-W (19)	4/11/2011	11040503	X	X	X	X	X	X			
P8-H3-W (19)	4/11/2011	11040503	X	X	X	X	X	X			
P8-H4-W (19)	4/11/2011	11040503	X	X	X	X	X	X			
P8-E1.2-F (20)	4/11/2011	11040502	X	X	X	X	X	X	X		
P8-E3.4-F (20)	4/13/2011	11040587	X	X	X	X	X	X	X		
P8-E1.2-F (22)	4/15/2011	11040728	X	X	X	X	X	X	X		
P8-E3.4-F (22)	4/15/2011	11040728	X	X	X	X	X	X	X		

Notes:

- P8 Phase 8 Tent Location
- A1 Grid Sample Location
- W Wall Sample
- F Floor Sample
- (20) Sample Depth



TABLE 4-1  
CONFIRMATION SAMPLE SUMMARY - PHASES 1 THROUGH 9  
CHAMPAIGN FORMER MGP SITE  
AMEREN ILLINOIS

Sample Identification	Date Collected	Teklab WO Number	VOCs (8260)	PNA (8270 SIMS)	SVOCs (8270)	RCRA Metals	Total Cyanide (9012)	Amenable Cyanide (9012)	TPH (OA-1, OA-2)	Pesticides/Herbicides	PCBs
P9-G1.5-F (14)	5/13/2011	11050704	X	X	X	X	X	X	X		
P9-G1.5-F (16)	5/13/2011	11050704	X	X	X	X	X	X	X		
P9-H1-W (3)	5/18/2011	11050904	X	X	X	X		X		X	X
P9-H1-W (8)	5/18/2011	11050904	X	X	X	X		X			
P9-H2-W (3)	5/18/2011	11050904	X	X	X	X		X			
P9-H2-W (8)	5/18/2011	11050904	X	X	X	X		X			
P9-H3-W (3)	5/18/2011	11050904	X	X	X	X		X			
P9-H3-W (8)	5/18/2011	11050904	X	X	X	X		X			
P9-H4-W (3)	5/18/2011	11050904	X	X	X	X		X			
P9-H4-W (8)	5/18/2011	11050904	X	X	X	X		X			
P9-G1-W (3)	5/19/2011	11051021	X	X	X	X	X	X			
P9-G1-W (8)	5/19/2011	11051021	X	X	X	X	X	X			
P9-G3-F (16.5)	5/19/2011	11051024	X	X	X	X	X	X	X		
P9-G3-F (18)	5/19/2011	11051024	X	X	X	X	X	X	X		
P9-FG1.5-F (16)	5/19/2011	11051024	X	X	X	X	X	X	X		
P9-FG1.5-F (18)	5/19/2011	11051024	X	X	X	X	X	X	X		
P9-H4-W (17)	5/25/2011	11051268	X	X	X	X	X	X			
P9-H3-W (16)	5/25/2011	11051268	X	X	X	X	X	X			
P9-H2-W (16)	5/25/2011	11051268	X	X	X	X	X	X			
P9-H1-W (15)	5/25/2011	11051268	X	X	X	X	X	X			
P9-G1-W (15)	5/25/2011	11051268	X	X	X	X	X	X			
P9-F1-W (3)	5/25/2011	11051268	X	X	X	X	X	X			
P9-F1-W (8)	5/25/2011	11051268	X	X	X	X	X	X			
P9-F1-W (15)	5/25/2011	11051268	X	X	X	X	X	X			
P9-E3-F (16)	6/1/2011	11060059	X	X	X	X	X	X	X		
P9-E3-F (18)	6/1/2011	11060059	X	X	X	X	X	X	X		
P9-DE1.5-F (16)	6/1/2011	11060059	X	X	X	X	X	X	X		
P9-DE1.5-F (18)	6/1/2011	11060059	X	X	X	X	X	X	X		
P9-DE1.5-F (24)	6/7/2011	11060324	X	X	X	X	X	X	X		
P9-E1-W (3)	6/7/2011	11060325	X	X	X	X	X	X			
P9-E1-W (8)	6/7/2011	11060325	X	X	X	X	X	X			
P9-E1-W (24)	6/10/2011	11060730	X	X	X	X	X	X			
P9-D1-W (3)	6/7/2011	11060325	X	X	X	X	X	X			
P9-D1-W (8)	6/7/2011	11060325	X	X	X	X	X	X			
P9-D1-W (24)	6/10/2011	11060730	X	X	X	X	X	X			
P9-DE1.5-F (26)	6/10/2011	11060557	X	X	X	X	X	X	X		

Notes:

- P9 Phase 9 Tent Location
- A1 Grid Sample Location
- W Wall Sample
- F Floor Sample
- (20) Sample Depth

TABLE 4-2  
PERIMETER SOIL SAMPLE SUMMARY  
CHAMPAIGN FORMER MGP SITE  
AMEREN ILLINOIS

Sample Identification	Date Collected	Teklab WO Number	BTEX (8260)	VOCs (8260)	PNA (8270 SIMS)	SVOCs (8270)	RCRA Metals	Total Cyanide (9012)	Amenable Cyanide (9012)	TPH (OA-1, OA-2)	Pesticides/Herbicides	PCBs
PA1-01 (3)	6/9/2011	11060553		X	X	X	X	X	X			
PA1-02 (3)	6/9/2011	11060553		X	X	X	X	X	X			
PA1-03 (3)	6/9/2011	11060553		X	X	X	X	X	X			
PA1-04 (3)	6/9/2011	11060553		X	X	X	X	X	X			
PA1-05 (3)	6/9/2011	11060553		X	X	X	X	X	X			
PA1-06 (3)	6/9/2011	11060553		X	X	X	X	X	X			
PA4-01(3)	7/27/2011	11080002	Benzene/ Xylene		X		Selenium/ 2-meth/ chrysene					
PA3-12(3)	7/27/2011	11080002	Benzene/ Xylene		X							
PA3-11(3)	7/27/2011	11080002	Benzene/ Xylene		X							
PA3-10(3)	7/27/2011	11080002	Benzene/ Xylene		X							
PA3-09(3)	7/28/2011	11080002	Benzene/ Xylene		X							
PA3-07(3)	7/28/2011	11080002	Benzene/ Xylene		X							
PA3-06(3)	7/28/2011	11080002	Benzene/ Xylene		X							
PA3-05(3)	7/29/2011	11080002	Benzene/ Xylene		X							
PA3-04(3)	7/29/2011	11080002	Benzene/ Xylene		X							
PA3-03(3)	7/29/2011	11080002	Benzene/ Xylene		X							
PA3-02(3)	8/1/2011	11080288	X		X		Arsenic / Chromium					
PA3-01(3)	8/1/2011	11080288	X		X		Arsenic / Chromium					
PA2-06(3)	8/1/2011	11080288					Arsenic					
PA2-05(3)	8/1/2011	11080288					Arsenic					
PA2-04(3)	8/1/2011	11080288					Arsenic					
PA2-03 (3)	8/2/2011	11080288					Arsenic					
PA2-02 (3)	8/2/2011	11080288					Arsenic					
PA2-01A(3)	8/3/2011	11080288		X	X		X - Arsenic/Chromium	X	X	X		X
PA2-01B(3)	8/3/2011	11080288		X	X		X - Arsenic/Chromium	X	X	X		X
PA6-1 (3)	8/9/2011	11080613			X		Arsenic / Selenium/ 2 Meth					
PA6-2 (3)	8/9/2011	11080613			X		Arsenic / Selenium/ 2 Meth					
PA6-3 (3)	8/9/2011	11080613			X		Arsenic / Selenium/ 2 Meth					
PA6-4 (3)	8/9/2011	11080613			X		Arsenic / Selenium/ 2 Meth					
PA5-1 (3)	8/9/2011	11080613	X		X		Arsenic / Selenium/ 2 Meth					
PA5-2 (3)	8/10/2011	11080613	X		X		Arsenic / Selenium/ 2 Meth					
PA5-3 (3)	8/10/2011	11080613	X		X		Arsenic / Selenium/ 2 Meth					
PA5-4 (3)	8/10/2011	11080613	X		X		Arsenic / Selenium/ 2 Meth					
PA5-5 (3)	8/10/2011	11080613	X		X		Arsenic / Selenium/ 2 Meth					
PA5-6 (3)	8/10/2011	11080613	X		X		Arsenic / Selenium/ 2 Meth					
PA2-01B (10)F	8/11/2011	11080614		X	X	X	X - Arsenic	X		X		X
PA2-01C (10)F	8/11/2011	11080614		X	X	X	X - Arsenic	X		X		X
PA2-03 (10)	8/15/2011	11080894		X	X	X	X	X		X		
PA2-04 Wall	8/15/2011	11080894		X	X	X	X	X		X		
PA3-15 (9)	8/15/2011	11080894	X		X		Arsenic / Chromium					
PA1-Wall	8/16/2011	11080894		X	X	X	X	X		X		

Notes:

- PA1 Perimeter Area
- 1 Grid Location
- (3) Sample Depth

TABLE 4-2  
PERIMETER SOIL SAMPLE SUMMARY  
CHAMPAIGN FORMER MGP SITE  
AMEREN ILLINOIS

Sample Identification	Date Collected	Teklab WO Number	BTEX (8260)	VOCs (8260)	PNA (8270 SIMS)	SVOCs (8270)	RCRA Metals	Total Cyanide (9012)	Amenable Cyanide (9012)	TPH (OA-1, OA-2)	Pesticides/Herbicides	PCBs
PA2-01A (10)	8/16/2011	11080894		X	X	X	X	X		X		
PA4-06 (3)	8/17/2011	11080894	X		X	X	Selenium/ 2-meth/ chrysene					
PA4-04 (3)	8/17/2011	11080894	X		X	X	Selenium/ 2-meth/ chrysene					
PA4-03 (3)	8/17/2011	11080894	X		X	X	Selenium/ 2-meth/ chrysene					
PA4-02 (3)	8/18/2011	11080894	X		X	X	Selenium/ 2-meth/ chrysene					
PA4-01 (3)	8/18/2011	11080894	X		X	X	Selenium/ 2-meth/ chrysene					
PA5-14 (3)	8/18/2011	11080893	X	X	X	Dibenzo (ah)/ Dibenzofuran/ Naph/ 2-Meth	Chrysene/ Selenium/ Mercury					
PA5-13 (3)	8/18/2011	11080893	X	X	X	Dibenzo (ah)/ Dibenzofuran/ Naph/ 2-Meth	Chrysene/ Selenium/ Mercury					
PA5-11 (3)	8/19/2011	11080893	X	X	X	Dibenzo (ah)/ Dibenzofuran/ Naph/ 2-Meth	Chrysene/ Selenium/ Mercury					
PA5-12 (3)	8/19/2011	11080893	X	X	X	Dibenzo (ah)/ Dibenzofuran/ Naph/ 2-Meth	Chrysene/ Selenium/ Mercury					
PA5-10 (3)	8/22/2011	11081123	X		X	2-Meth	Chrysene/ Selenium/ Mercury					
PA5-09 (3)	8/22/2011	11081123	X		X	2-Meth	Chrysene/ Selenium/ Mercury					
PA5-08 (3)	8/23/2011	11081123	X		X	2-Meth	Chrysene/ Selenium/ Mercury					
PA4-00 (10)	8/23/2011	11081123	X		X	2-Meth	Chrysene/ Selenium					
PA5-07 (3)	8/23/2011	11081123	X		X	2-Meth	Chrysene/ Selenium/ Mercury					

Notes:

- PA1 Perimeter Area
- 1 Grid Location
- (3) Sample Depth

Table 5-1  
Soil Confirmation Sample Analytical Results For Excavation Wall - BTEX and PNAs  
Champaign Former MGP Site  
Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component to Groundwater <sup>(2)</sup>	IEPA Accepted Background Levels for MSA	Project Remediation Objectives	Sample Location: Sample ID: Sample Date: Sample Depth (feet):	P1-A1-W	P1-A1-W	P1-A1-W	P1-A2-W	P1-A2-W	P1-A2-W	P1-A3-W	P1-A3-W	P1-A3-W	P1-A4-W	P1-A4-W	P1-A4-W	P1-A5-W	P1-A5-W	P1-A5-W	P2-A1-W	P2-A1-W	P2-A1-W	P2-A2-W
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial					P1-A1-W (0-3)	P1-A1-W (5-8)	P1-A1-W (12)	P1-A2-W (0-3)	P1-A2-W (5-6)	P1-A2-W (15)	P1-A3-W (3)	P1-A3-W (10)	P1-A3-W (20)	P1-A4-W (3)	P1-A4-W (8)	P1-A4-W (20)	P1-A5-W (3)	P1-A5-W (8)	P1-A5-W (20)	P2-A1-W (3)	P2-A1-W (8)	P2-A1-W (20)	P2-A2-W (3)
<b>BTEX Constituents (mg/kg)</b>																															
Benzene	12	100	2,300	0.8	1.6	2.2	0.069	0.51	0.03	---	0.069	0.303	2.42	23.9	3.96	2.47	4.96	154	0.86	9.72	0.115	1.89	8.26	1.39	1.35	44.8	15.8	3.59	0.448	0.684	
Ethylbenzene	7,800	200,000	20,000	400	400	58	130	130	13	---	58	0.330	18.9	3.4	16.9	18.5	6.24	72.0	1.83	5.1	0.207	3.83	2.93	22.2	13.2	<-0.112	6.8	8.48	2.15	0.53	
Toluene	16,000	410,000	410,000	650	650	42	240	240	12	---	42	0.660	<5.48	30.2	<5.76	<7.340	0.66	<97.7	<1.54	14	0.047	0.410	6.36	<5.17	<4.16	4.88	10	<5.69	0.35	0.44	
m,p-Xylenes	16,000	410,000	41,000	420 <sup>(1)</sup>	420 <sup>(1)</sup>	5.9 <sup>(2)</sup>	75 <sup>(2)</sup>	120 <sup>(2)</sup>	200 <sup>(2)</sup>	---	---	0.540	5.48	12.1	8.77	10.1	4.15	50.0	0.42	18.0	0.194	1.57	5.47	8.54	7.24	<-0.112	25.5	4.4	1.41	1.1	
o-Xylene	16,000	410,000	41,000	410	410	6.5	98	140	190	---	---	0.270	6.98	5.2	5.7	7.59	2.83	<97.7	0.53	8.01	0.120	1.0	2.8	7.77	5.42	<-0.112	13	2.9	0.75	0.63	
Xylenes	16,000	410,000	41,000	320	320	5.6	63	100	150	---	5.6	0.810	12.460	17.3	14.470	17.690	6.980	50.0	0.950	26.010	0.314	2.570	8.270	16.310	12.660	<-0.112	38.5	7.3	2.16	1.73	
<b>PNA Constituents (mg/kg)</b>																															
Acenaphthene	4,700	120,000	120,000	---	---	---	---	---	570	0.13	4,700	4.21	35.5	0.435	56.3	12.0	1.6	160	28	9.7	0.31	37	23	60.7	8.7	0.013	13.1	21.3	0.935	0.42	
Acenaphthylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	85 <sup>(4)</sup>	0.07	2,300	64.8	5	2.69	7.59	1.79	0.59	17	2.2	30	0.12	3.7	26	4.63	1.01	0.003	12.8	4.58	0.421	0.61	
Anthracene	23,000	610,000	610,000	---	---	---	---	---	12,000	0.4	---	16.1	19.3	1.06	33.2	5.86	0.97	86	12	22	0.21	17	24	26.3	3.84	0.006	11.6	9.46	0.629	0.785	
Benzo(a)anthracene	0.90	8	170	---	---	---	---	---	2	1.8	2	72	9.08	0.567	15.3	3.26	0.48	49	6.4	11	0.22	8.2	13	12	1.65	0.007	9.11	4.97	0.353	1.08	
Benzo(a)pyrene	0.09	0.80	17	---	---	---	---	---	8	2.1	2.1	166	8.38	0.583	14.2	2.94	0.38	44	5.7	10	0.3	8.4	13	11.4	1.39	0.004	7.49	4.92	0.386	0.886	
Benzo(b)fluoranthene	0.90	8	170	---	---	---	---	---	5	2.1	2.1	151	6.73	0.437	11.6	2.36	0.32	39	4.6	8	0.25	6.3	9.9	8.61	1.08	<-0.004	8.17	3.91	0.324	1.08	
Benzo(g,h,i)perylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	27,000 <sup>(4)</sup>	1.7	---	106	2.79	0.279	4.94	0.956	0.16	21	2.6	4.4	0.18	3.6	5.7	4.86	0.595	<-0.004	2.07	1.88	0.127	0.246	
Benzo(k)fluoranthene	9	78	1,700	---	---	---	---	---	49	1.7	9	42.4	2.4	0.155	4.31	0.856	0.098	13	1.6	2.7	0.087	2.1	3.2	3.02	0.34	<-0.004	3.06	1.28	0.105	0.432	
Bis(2-ethylhexyl)phthalate	46	410	4,100	31,000	31,000	31,000	---	---	3,600	---	---	<16.6	<8.54	<0.724	<8.67	<4.38	<0.74	<55	<8.8	<19	<0.092	<9.1	<19	<8.61	<7.52	<-0.075	<7.82	<4.73	<-0.076	<2.4	
Chrysene	88	780	17,000	---	---	---	---	---	160	2.7	88	70	9.37	0.598	16.1	3.38	0.45	49	6.3	12	0.24	8.5	14	13.3	1.57	0.004	9.77	5.68	0.397	1.2	
Dibenzo(a,h)anthracene	0.09	0.80	17	---	---	---	---	---	2	0.42	0.42	23.3	0.786	0.062	1.38	0.261	0.043	5.5	0.65	1.1	0.044	0.92	1.4	1.16	<-0.381	<-0.004	1.05	0.48	0.034	<-0.122	
Fluoranthene	3,100	82,000	82,000	---	---	---	---	---	4,300	4.1	---	81.7	22	1.17	36.8	7.15	0.99	110	15	24	0.37	19	27	28.8	3.67	0.008	24.3	11.6	0.821	2.55	
Fluorene	3,100	82,000	82,000	---	---	---	---	---	560	0.18	3,100	6.66	25.7	1.67	38.3	8.96	1.0	65	13	24	0.16	14	33	25.2	5.16	0.008	17.3	10.5	0.646	0.775	
Indeno(1,2,3-cd)pyrene	0.90	8.00	170	---	---	---	---	---	14	1.6	1.6	78.1	2.29	0.191	4.32	0.795	0.13	17	2	3.2	0.14	2.8	4.3	3.64	0.449	<-0.004	2.48	1.51	0.106	0.297	
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	0.2	1.8	10.8	74.8	10.2	141	26.3	11.0	340	73	170	0.38	65	160	187	33.5	0.08	44.9	58.2	1.52	1.59	
Phenanthrene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	200 <sup>(4)</sup>	2.5	2,300	17.5	68.2	3.57	104	23.2	3.4	260	40	79	0.48	54	81	77.8	13.8	0.023	43.6	37.8	1.89	2.68	
Pyrene	2,300	61,000	61,000	---	---	---	---	---	4,200	3	---	160	30.4	1.7	47.3	9.74	1.4	150	20	35	0.49	27	39	39.9	5.22	0.012	17.2	16.4	1.21	1.86	

Notes:  
<sup>(1)</sup> Objective is for m-xylene  
<sup>(2)</sup> Objective is for p-xylene  
<sup>(3)</sup> Objectives are for Class I groundwater.  
<sup>(4)</sup> Non-TACO or provisional ROs provided by the IEPA.  
 --- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.  
 Concentration exceeds one or more project remediation objective.

Table 5-1  
Soil Confirmation Sample Analytical Results For Excavation Wall - BTEX and PNAs  
Champaign Former MGP Site  
Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component to Groundwater <sup>(3)</sup>	IEPA Accepted Background Levels for MSA	Project Remediation Objectives	Sample Location: Sample ID: Sample Date: Sample Depth (feet):	P2-A3-W	P2-A3-W	P2-A3-W	P3-A1-W	P3-A1-W	P3-A1-W	P3-A2-W	P3-A2-W	P3-A3-W	P3-A3-W	P3-A4-W	P3-A4-W	P3-A4-W	P3-B-5-W	P3-B-5-W	P3-C1-W	P3-C1-W	P3-A-5-W
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial					P2-A3-W (3)	P2-A3-W (8)	P2-A3-W (20)	P3-A1-W (3)	P3-A1-W (10)	P3-A1-W (15)	P3-A2-W (8)	P3-A2-W (16)	P3-A3-W (3)	P3-A3-W (6)	P3-A4-W (3)	P3-A4-W (10)	P3-A4-W (15)	P3-B-5-W (8)	P3-B-5-W (15)	P3-C1-W (10)	P3-C1-W (18)	P3-A-5-W (8)
<b>BTEX Constituents (mg/kg)</b>																														
Benzene	12	100	2,300	0.8	1.6	2.2	0.069	0.51	0.03	---	0.069		<0.99	<0.908	7.04	11.7	15.7	6.91	3.62	6.3	2.26	2.62	5.61	<1	1.61	81.8	10.6	146	118	11.7
Ethylbenzene	7,800	200,000	20,000	400	400	58	130	130	13	---	58		3.5	10.9	13.3	2.4	6	1.94	<6.33	<0.411	1.89	1.76	1.91	2.5	<0.427	9.7	<20.5	34.6	33	<26
Toluene	16,000	410,000	410,000	650	650	42	240	240	12	---	42		<4.95	<4.54	5	9.99	26.6	6.72	3.3	<0.411	5.52	0.059	2	<5.02	<0.427	123	13	311	267	18
m,p-Xylenes	16,000	410,000	41,000	420 <sup>(1)</sup>	420 <sup>(1)</sup>	5.9 <sup>(2)</sup>	75 <sup>(2)</sup>	120 <sup>(2)</sup>	200 <sup>(2)</sup>	---	---		1	4.74	8.7	14	39.3	11.2	2.7	<0.411	13.1	0.616	2.38	1.7	<0.427	91.7	6.8	301	258	21
o-Xylene	16,000	410,000	41,000	410	410	6.5	98	140	190	---	---		1.3	3.5	5.2	5.6	15.5	4.18	<6.33	<0.411	5.54	0.799	1.43	<5.02	<0.427	33.1	<20.5	115	102	8.2
Xylenes	16,000	410,000	41,000	320	320	5.6	63	100	150	---	5.6		2.3	8.24	13.9	19.6	54.8	15.38	2.7	<0.411	18.64	1.415	3.81	1.7	<0.427	124.8	6.8	416	360	29.2
<b>PNA Constituents (mg/kg)</b>																														
Acenaphthene	4,700	120,000	120,000	---	---	---	---	---	570	0.13	4,700		31.6	40.2	2.4	6.14	2.64	0.053	0.312	<0.004	10.3	0.204	24.8	8.58	0.006	23.1	0.572	43.9	25.3	8.73
Acenaphthylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	85 <sup>(4)</sup>	0.07	2,300		8.18	8.53	0.89	27.7	9.05	0.326	0.054	<0.004	18.6	0.01	9.2	4.54	<0.004	96.5	1.99	209	122	25.5
Anthracene	23,000	610,000	610,000	---	---	---	---	---	12,000	0.4	---		14.4	18	1.42	52.1	10.7	0.077	0.083	<0.004	29.7	<0.005	26.3	5.53	0.005	90	0.708	158	93.9	32
Benzo(a)anthracene	0.90	8	170	---	---	---	---	---	2	1.8	2		10.2	8	0.765	145	5.34	0.05	<0.004	<0.004	19	0.014	38.9	2.95	0.006	60.5	0.213	100	53.7	15.4
Benzo(a)pyrene	0.09	0.80	17	---	---	---	---	---	8	2.1	2.1		14.8	7.3	0.818	146	3.81	0.047	<0.004	<0.004	14.7	0.023	41.3	2.59	<0.004	48.2	<0.191	79.1	39.9	11.4
Benzo(b)fluoranthene	0.90	8	170	---	---	---	---	---	5	2.1	2.1		12.1	5.77	0.688	182	4.04	0.055	<0.004	<0.004	16.6	0.025	46.3	1.97	0.004	54.9	<0.191	90.7	44.9	12.1
Benzo(g,h,i)perylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	27,000 <sup>(4)</sup>	1.7	---		7.27	2.6	0.282	83.6	1.81	0.027	<0.004	<0.004	5.53	0.032	19.8	1.07	0.004	17.7	<0.191	24	12.5	2.88
Benzo(k)fluoranthene	9	78	1,700	---	---	---	---	---	49	1.7	9		3.66	1.82	0.24	70	1.69	0.02	<0.004	<0.004	6.59	0.022	17.2	0.728	<0.004	21.5	<0.191	29.8	17.3	4.87
Bis(2-ethylhexyl)phthalate	46	410	4,100	31,000	31,000	31,000	---	---	3,600	---	---		<4.43	<4.47	<0.429	<47.1	<24.3	<0.075	<0.088	<0.076	<11.1	<0.094	<13.7	4.12	<0.079	<23.1	<3.76	<25.7	<22.8	<9.23
Chrysene	88	780	17,000	---	---	---	---	---	160	2.7	88		12.7	8.79	0.874	146	4.61	0.05	<0.004	<0.004	19	0.013	40.4	2.84	0.004	58.1	<0.191	102	54.9	14.5
Dibenzo(a,h)anthracene	0.09	0.80	17	---	---	---	---	---	2	0.42	0.42		1.78	0.732	0.076	23.6	<1.23	0.008	<0.004	<0.004	2.75	0.025	5.82	0.308	<0.004	6.65	<0.191	10.8	5.64	1.24
Fluoranthene	3,100	82,000	82,000	---	---	---	---	---	4,300	4.1	---		20.8	18.6	1.76	321	13.3	0.135	0.024	<0.004	50.8	<0.005	95.9	6.22	0.009	184	0.409	271	147	44.1
Fluorene	3,100	82,000	82,000	---	---	---	---	---	560	0.18	3,100		13.6	19.3	1.36	21.7	12.3	0.199	0.311	<0.004	37.9	0.151	21.9	6.83	0.005	116	2.31	219	124	40.3
Indeno(1,2,3-cd)pyrene	0.90	8.00	170	---	---	---	---	---	14	1.6	1.6		5.6	2.14	0.241	83.3	1.71	0.024	<0.004	<0.004	5.99	0.031	19.5	0.843	<0.004	19	<0.191	28.4	14.5	3.25
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	0.2	1.8		37.1	107	7.07	45.2	43.7	3.51	3.53	0.011	140	1.35	14.7	25.4	0.026	748	21.1	1380	582	254
Phenanthrene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	200 <sup>(4)</sup>	2.5	2,300		50.5	69.3	5.11	161	27.5	0.234	0.324	<0.004	90.4	0.018	94.9	20.1	0.016	313	2.52	489	258	95.2
Pyrene	2,300	61,000	61,000	---	---	---	---	---	4,200	3	---		30.4	25.7	2.33	275	11.7	0.109	0.01	<0.004	37.5	<0.005	82.5	8.5	0.01	135	0.282	199	109	35.8

Notes:  
<sup>(1)</sup> Objective is for m-xylene  
<sup>(2)</sup> Objective is for p-xylene  
<sup>(3)</sup> Objectives are for Class I groundwater.  
<sup>(4)</sup> Non-TACO or provisional ROs provided by the IEPA.  
 --- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.  
 Concentration exceeds one or more project remediation objective.

Table 5-1  
Soil Confirmation Sample Analytical Results For Excavation Wall - BTEX and PNAs  
Champaign Former MGP Site  
Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component to Groundwater <sup>(3)</sup>	IEPA Accepted Background Levels for MSA	Project Remediation Objectives	Sample Location: Sample ID: Sample Date: Sample Depth (feet):	P3-A.5-W (20)	P3-B-W (8)	P3-C.5-W (8)	P3-C.5-W (20)	P3-D-W (8)	P3-D.5-W (8)	P3-D.5-W (20)	P3-E-W (8)	P3-E-W (20)	P3-E.5-W (8)	P3-E.5-W (20)	P3-F-W (8)	P3-F-W (20)	P3-A1.5-W (8)	P3-A1.5-W (20)	P3-A2.5-W (3)	P3-A2.5-W (8)	P3-A2.5-W (20)
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial					1/20/2010	1/20/2010	1/20/2010	1/20/2010	1/20/2010	1/27/2010	1/27/2010	1/27/2010	1/27/2010	1/27/2010	1/27/2010	1/27/2010	1/27/2010	1/27/2010	1/27/2010	1/27/2010	1/27/2010	1/27/2010
<b>BTEX Constituents (mg/kg)</b>																														
Benzene	12	100	2,300	0.8	1.6	2.2	0.069	0.51	0.03	---	0.069	5.1	16.4	7.84	10.4	21.3	8.87	22	9.29	<0.418	222	13.4	56.3	16.1	39.7	6.86	3.59	2.27	7.16	
Ethylbenzene	7,800	200,000	20,000	400	400	58	130	130	13	---	58	0.9	<27.2	3.9	<27.2	32	0.94	30.7	2.9	0.54	62.9	11.5	6.88	1.5	11.8	2.5	5.83	2.5	1.0	
Toluene	16,000	410,000	410,000	650	650	42	240	240	12	---	42	<3.26	23	6.89	13	44.1	6.39	35.8	8.06	0.95	156	13	4.4	9.66	65.5	1.3	2.04	4.3	8.96	
m,p-Xylenes	16,000	410,000	41,000	420 <sup>(1)</sup>	420 <sup>(1)</sup>	5.9 <sup>(2)</sup>	75 <sup>(2)</sup>	120 <sup>(2)</sup>	200 <sup>(2)</sup>	---	---	2.7	20	19.1	10	56.4	5.59	34.9	18.8	2.6	300	18	58.2	9.77	78.8	8.29	13.2	7.61	5.38	
o-Xylene	16,000	410,000	41,000	410	410	6.5	98	140	190	---	---	1.0	7.7	7.79	<27.2	26	2.2	17.2	8.33	1.1	139	8.35	22.4	4.1	29.5	2.8	1.72	3.1	2.0	
Xylenes	16,000	410,000	41,000	320	320	5.6	63	100	150	---	5.6	3.7	27.7	26.89	10	82.4	7.79	52.1	27.13	3.7	439	26.35	80.6	13.87	108.3	11.09	14.92	10.71	7.38	
<b>PNA Constituents (mg/kg)</b>																														
Acenaphthene	4,700	120,000	120,000	---	---	---	---	---	570	0.13	4,700	0.096	32.6	9.65	0.678	33.7	1.26	18	2.37	2.22	2.08	2.27	3.4	1.65	1.96	<0.038	2.95	4.36	<0.037	
Acenaphthylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	85 <sup>(4)</sup>	0.07	2,300	0.162	101	9.01	2.54	68.6	5.4	16.6	4.84	8.01	4.26	2.79	3.7	2.65	8.1	0.073	1.81	12.3	0.12	
Anthracene	23,000	610,000	610,000	---	---	---	---	---	12,000	0.4	---	0.226	110	9.11	2.2	34.7	5.56	14.3	6.69	7.95	5.11	2.84	17.6	4.76	7.54	0.03	4.99	10.7	0.039	
Benzo(a)anthracene	0.90	8	170	---	---	---	---	---	2	1.8	2	0.159	69.6	9.36	1.77	22.9	3.52	8.73	5.4	5.04	3.64	2.05	13.5	3.38	4.73	0.137	3.54	7.06	0.082	
Benzo(a)pyrene	0.09	0.80	17	---	---	---	---	---	8	2.1	2.1	0.128	55.1	11.3	1.88	22.2	2.76	6.71	3.85	3.88	2.6	1.23	9.38	2.17	2.78	0.179	2.16	4.07	0.064	
Benzo(b)fluoranthene	0.90	8	170	---	---	---	---	---	5	2.1	2.1	0.138	57.8	9.32	1.98	19.9	2.96	5.8	3.62	3.59	2.33	1.14	10.3	2.1	3.1	0.189	2.62	4.31	0.072	
Benzo(g,h,i)perylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	27,000 <sup>(4)</sup>	1.7	---	0.045	15.9	5.93	0.858	9.48	1.13	3.17	1.88	1.89	1.26	<0.758	3.84	0.898	1.06	0.13	0.854	1.26	0.045	
Benzo(k)fluoranthene	9	78	1,700	---	---	---	---	---	49	1.7	9	0.048	20.8	3.19	0.655	6.75	1.15	1.94	1.3	1.26	0.84	<0.758	3.85	0.778	1.17	0.06	0.889	1.82	<0.037	
Bis(2-ethylhexyl)phthalate	46	410	4,100	31,000	31,000	31,000	---	---	3,600	---	---	<0.382	<12.5	<4.27	<3.85	<4.3	<1.52	<11.2	<16.5	<14.3	<16.8	<14.9	<16.7	<15.2	<17.5	<0.748	<14.3	<13.1	<0.739	
Chrysene	88	780	17,000	---	---	---	---	---	160	2.7	88	0.153	68.5	8.83	1.69	22.4	3.22	8.2	4.07	4.2	3.05	1.26	10.8	2.3	3.78	0.095	2.96	6.51	0.053	
Dibenzo(a,h)anthracene	0.09	0.80	17	---	---	---	---	---	2	0.42	0.42	<0.019	6.17	1.35	0.243	2.69	0.461	0.81	<0.839	0.57	<0.854	<0.758	1.43	<0.77	<0.888	0.034	<0.726	0.6	<0.037	
Fluoranthene	3,100	82,000	82,000	---	---	---	---	---	4,300	4.1	---	0.413	193	20.2	4.18	51.4	10.2	20.8	12.6	12.7	7.54	4.06	34	7.39	11.6	0.171	8.91	15.6	0.114	
Fluorene	3,100	82,000	82,000	---	---	---	---	---	560	0.18	3,100	0.244	151	11.1	2.16	45.9	6.51	18.9	7.69	8.17	5.63	3.28	15.7	5.1	9.27	<0.038	5.95	14.5	0.043	
Indeno(1,2,3-cd)pyrene	0.90	8.00	170	---	---	---	---	---	14	1.6	1.6	0.04	16.9	4.3	0.789	7.88	1.49	3.17	2.05	2.06	1.19	<0.758	4.94	1.05	1.32	0.137	1.1	1.8	0.047	
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	0.2	1.8	1.17	528	124	22.4	593	34.8	150	98.7	83.6	290	44.7	204	76.3	48.6	1.39	19.2	87.4	1.68	
Phenanthrene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	200 <sup>(4)</sup>	2.5	2,300	0.758	386	37.5	6.67	112	18.6	56.6	25.5	26.1	16	9.63	61.3	14.7	21.4	0.103	15.2	26.4	0.123	
Pyrene	2,300	61,000	61,000	---	---	---	---	---	4,200	3	---	0.406	185	22.2	3.82	62.3	7.52	25.7	12.9	12.5	8.79	4.49	25.9	6.89	8.68	0.196	6.74	11.5	0.114	

Notes:  
<sup>(1)</sup> Objective is for m-xylene  
<sup>(2)</sup> Objective is for p-xylene  
<sup>(3)</sup> Objectives are for Class I groundwater.  
<sup>(4)</sup> Non-TACO or provisional ROs provided by the IEPA.  
 --- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.  
 Concentration exceeds one or more project remediation objective.

Table 5-1  
Soil Confirmation Sample Analytical Results For Excavation Wall - BTEX and PNAs  
Champaign Former MGP Site  
Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component to Groundwater <sup>(3)</sup>	IEPA Accepted Background Levels for MSA	Project Remediation Objectives	Sample Location: Sample ID: Sample Date: Sample Depth (feet):	P3-F-5-W	P3-F-5-W	P3-F-5-W	P3-G-W	P3-G-W	P3-G-W	P3-G-5-W	P3-G-5-W	P3-G-5-W	P3-H-W	P3-H-W	P3-H-5-W	P3-H-5-W	P3-H-5-W	P4-A1-W	P4-A1-W	P4-A1-W	P4-A2-W
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial					P3-F-5-W (3)	P3-F-5-W (8)	P3-F-5-W (20)	P3-G-W (3)	P3-G-W (8)	P3-G-W (20)	P3-G-5-W (3)	P3-G-5-W (8)	P3-G-5-W (20)	P3-H-W (3)	P3-H-W (20)	P3-H-5-W (3)	P3-H-5-W (8)	P3-H-5-W (20)	P4-A1-W (3)	P4-A1-W (8)	P4-A1-W (20)	P4-A2-W (3)
<b>BTEX Constituents (mg/kg)</b>																														
Benzene	12	100	2,300	0.8	1.6	2.2	0.069	0.51	0.03	---	0.069		1.2	7.44	43.9	29.7	0.75	25.3	31.7	0.288	42.6	0.0082	28.2	0.0065	0.217	9.28	3.65	2.08	1460	7.3
Ethylbenzene	7,800	200,000	20,000	400	400	58	130	130	13	---	58		<5.99	<4.64	<4.08	4.6	1.0	1.8	<2.55	<0.115	<1.67	0.0024	0.31	0.0026	0.12	12.8	9.75	14.9	282	49.6
Toluene	16,000	410,000	410,000	650	650	42	240	240	12	---	42		<5.99	<4.64	15	31.1	<1.19	20.8	<2.55	0.029	3.28	0.0029	1.12	0.0048	0.22	3.95	<6.5	<4.84	2510	<29
m,p-Xylenes	16,000	410,000	41,000	420 <sup>(1)</sup>	420 <sup>(1)</sup>	5.9 <sup>(2)</sup>	75 <sup>(2)</sup>	120 <sup>(2)</sup>	200 <sup>(2)</sup>	---	---		<5.99	3.6	<4.08	16.7	<1.19	7.58	<2.55	<0.115	<1.67	0.0041	1.71	0.0056	0.29	12.5	2.4	4.2	1190	13.7
o-Xylene	16,000	410,000	41,000	410	410	6.5	98	140	190	---	---		<5.99	1.5	<4.08	7.45	<1.19	3.7	<2.55	<0.115	<1.67	0.0023	1.03	0.0022	0.16	6.15	<6.5	4.7	491	15.6
Xylenes	16,000	410,000	41,000	320	320	5.6	63	100	150	---	5.6		<5.99	5.1	<4.08	24.15	<1.19	11.28	<2.55	<0.115	<1.67	0.0064	2.74	0.0078	0.45	18.65	2.4	8.9	1681	29.3
<b>PNA Constituents (mg/kg)</b>																														
Acenaphthene	4,700	120,000	120,000	---	---	---	---	---	570	0.13	4,700		0.53	0.554	0.015	2.21	0.185	0.253	0.638	0.273	0.058	0.037	<0.004	0.345	0.74	0.45	22.4	31.9	53.8	117
Acenaphthylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	85 <sup>(4)</sup>	0.07	2,300		1.27	0.833	0.022	7.79	0.252	1.47	2.01	0.086	0.106	0.456	<0.004	1.0	0.554	0.14	1.43	2.03	273	6.72
Anthracene	23,000	610,000	610,000	---	---	---	---	---	12,000	0.4	---		1.87	1.92	0.03	5.26	0.4	0.815	1.67	0.013	0.031	0.25	<0.004	1.91	0.371	0.171	6.59	9.74	122	40.3
Benzo(a)anthracene	0.90	8	170	---	---	---	---	---	2	1.8	2		4.06	1.28	0.026	3.12	0.136	0.506	1.09	<0.012	0.023	1.43	0.005	11.7	0.717	0.119	3.55	5.67	75.4	19.8
Benzo(a)pyrene	0.09	0.80	17	---	---	---	---	---	8	2.1	2.1		3.56	0.963	0.02	3.05	0.108	0.414	1.03	<0.012	0.018	1.62	<0.004	13.1	0.688	0.089	3.35	5.05	72.1	17.1
Benzo(b)fluoranthene	0.90	8	170	---	---	---	---	---	5	2.1	2.1		4.58	0.978	0.02	2.52	0.098	0.348	0.852	<0.012	0.017	2.51	0.004	18.5	0.548	0.081	2.62	4.05	55.2	13.1
Benzo(g,h,i)perylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	27,000 <sup>(4)</sup>	1.7	---		1.86	0.391	0.011	1.29	0.054	0.16	0.427	<0.012	0.012	1.34	<0.004	7.52	0.229	<0.038	1.33	1.82	27.3	6.94
Benzo(k)fluoranthene	9	78	1,700	---	---	---	---	---	49	1.7	9		1.78	0.365	<0.011	0.822	0.034	0.11	0.294	<0.012	<0.011	0.835	<0.004	6.27	0.186	<0.038	0.85	1.3	18	4.05
Bis(2-ethylhexyl)phthalate	46	410	4,100	31,000	31,000	31,000	---	---	3,600	---	---		<11.2	<4.42	0.17	<2.3	<0.239	<2.22	<2.19	<0.244	<0.212	<0.762	<0.074	<1.55	<2.01	<0.755	<4.93	<4.26	<146	<9.3
Chrysene	88	780	17,000	---	---	---	---	---	160	2.7	88		3.78	1.08	0.019	2.95	0.122	0.426	1.03	<0.012	0.022	1.7	0.004	12.4	0.663	0.095	3.36	5.61	71.3	20
Dibenzo(a,h)anthracene	0.09	0.80	17	---	---	---	---	---	2	0.42	0.42		0.55	<0.224	<0.011	0.315	0.013	<0.113	0.11	<0.012	<0.011	0.369	<0.004	2.5	<0.102	0.377	0.536	7.2	1.92	
Fluoranthene	3,100	82,000	82,000	---	---	---	---	---	4,300	4.1	---		6.35	2.78	0.045	6.01	0.438	1.08	2.19	0.013	0.041	1.97	<0.004	18	1.36	0.217	7.18	13	168	43.7
Fluorene	3,100	82,000	82,000	---	---	---	---	---	560	0.18	3,100		1.59	1.88	0.036	6.31	0.475	1.03	1.6	0.06	0.047	0.113	<0.004	0.518	0.789	0.274	8.75	13.6	155	62.1
Indeno(1,2,3-cd)pyrene	0.90	8.00	170	---	---	---	---	---	14	1.6	1.6		1.82	0.358	<0.011	1.01	0.043	0.129	0.341	<0.012	<0.011	1.2	<0.004	7.38	0.198	<0.038	1.11	1.57	22.1	5.5
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	0.2	1.8		10.6	26.3	0.523	52.6	0.474	11.7	15.9	0.015	15	0.338	0.044	0.386	<0.102	9.94	65.5	70	1850	330
Phenanthrene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	200 <sup>(4)</sup>	2.5	2,300		5.61	5.77	0.106	18	1.3	2.98	5.27	0.041	0.105	0.825	0.007	6.86	3.31	0.707	23.1	40.3	449	147
Pyrene	2,300	61,000	61,000	---	---	---	---	---	4,200	3	---		5.77	2.64	0.051	8.16	0.51	1.45	2.77	0.013	0.056	2.18	0.004	17.1	1.96	0.322	9.79	19.5	240	62.6

Notes:  
<sup>(1)</sup> Objective is for m-xylene  
<sup>(2)</sup> Objective is for p-xylene  
<sup>(3)</sup> Objectives are for Class I groundwater.  
<sup>(4)</sup> Non-TACO or provisional ROs provided by the IEPA.  
 --- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.  
 Concentration exceeds one or more project remediation objective.

Table 5-1  
Soil Confirmation Sample Analytical Results For Excavation Wall - BTEX and PNAs  
Champaign Former MGP Site  
Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component to Groundwater <sup>(3)</sup>	IEPA Accepted Background Levels for MSA	Project Remediation Objectives	Sample Location: Sample ID: Sample Date: Sample Depth (feet):	P4-A2-W	P4-A2-W	P4-A3-W	P4-A3-W	P4-A3-W	P4-A4-W	P4-A4-W	P4-A4-W	P4-A5-W	P4-A5-W	P4-A5-W	P5-A3-W	P5-A3-W	P5-A3-W	P5-A4-W	P5-A4-W	P5-A4-W	P5-A4-W	P5-A5-W
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial					P4-A2-W (8)	P4-A2-W (20)	P4-A3-W (3)	P4-A3-W (8)	P4-A3-W (20)	P4-A4-W (3)	P4-A4-W (8)	P4-A4-W (20)	P4-A5-W (3)	P4-A5-W (8)	P4-A5-W (20)	P5-A3-W (3)	P5-A3-W (8)	P5-A3-W (20)	P5-A4-W (3)	P5-A4-W (8)	P5-A4-W (20)	P5-A4-W (3)	P5-A4-W (8)
<b>BTEX Constituents (mg/kg)</b>																															
Benzene	12	100	2,300	0.8	1.6	2.2	0.069	0.51	0.03	---	0.069		<4.67	29.7	<6.42	2.52	59	1.82	1.73	7.05	4.95	2.86	2.88	5.73	<1.05	4.8	<1.05	<0.945	4.97	<0.0919	
Ethylbenzene	7,800	200,000	20,000	400	400	58	130	130	13	---	58		46.1	8.9	72.8	15.2	<6.59	15.7	11.3	1.7	26.7	13.5	<7.91	62.1	8.15	0.72	6.21	<4.73	5.1	0.578	
Toluene	16,000	410,000	410,000	650	650	42	240	240	12	---	42		<23.3	52.2	<32.1	<12.5	28.3	<6.32	<6.47	6.9	<10.8	<6.52	1.8	<6.31	<5.26	0.55	1.4	<4.73	<24.6	<0.46	
m,p-Xylenes	16,000	410,000	41,000	420 <sup>(1)</sup>	420 <sup>(1)</sup>	5.9 <sup>(2)</sup>	75 <sup>(2)</sup>	120 <sup>(2)</sup>	200 <sup>(2)</sup>	---	---		17.8	37.7	22.5	5.58	<6.59	2.4	3.65	4.4	6.05	<6.52	<7.91	14.9	1.9	1.86	2.4	<4.73	8.0	<0.46	
o-Xylene	16,000	410,000	41,000	410	410	6.5	98	140	190	---	---		16.1	17	26.8	6.06	<6.59	4.14	4.35	2	9.25	<6.52	<7.91	23.2	3.4	0.812	4.2	1.8	<24.60	0.21	
Xylenes	16,000	410,000	41,000	320	320	5.6	63	100	150	---	5.6		23.9	54.7	49.3	11.64	<6.59	6.54	8.0	6.4	15.3	<6.52	<7.91	38.1	5.3	2.672	6.6	1.8	8.0	0.21	
<b>PNA Constituents (mg/kg)</b>																															
Acenaphthene	4,700	120,000	120,000	---	---	---	---	---	570	0.13	4,700		35.9	14.6	189	16.4	0.29	23.4	29.6	1.46	7.86	24.3	0.401	106	2.42	17.5	40.8	0.614	2.15	4.82	
Acenaphthylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	85 <sup>(4)</sup>	0.07	2,300		3.68	101	12.3	1.01	1.18	1.87	2.41	2.79	0.499	2.1	0.096	6.42	0.283	2.8	2.76	0.433	0.385	1.98	
Anthracene	23,000	610,000	610,000	---	---	---	---	---	12,000	0.4	---		15.6	49.6	72.1	6.38	0.759	8.58	11.9	1.85	2.73	9.97	0.247	38.5	0.896	9.55	16.7	0.443	1.2	5.35	
Benzo(a)anthracene	0.90	8	170	---	---	---	---	---	2	1.8	2		7.66	31.7	33.9	2.96	0.486	4.8	5.99	1.1	1.27	4.91	0.164	19	0.505	4.86	8.25	0.365	0.638	3.92	
Benzo(a)pyrene	0.09	0.80	17	---	---	---	---	---	8	2.1	2.1		7.26	31.9	29.5	2.45	0.466	4.37	5.21	1.03	1.07	4.26	0.164	15.3	0.399	4.42	6.96	0.419	0.544	3.67	
Benzo(b)fluoranthene	0.90	8	170	---	---	---	---	---	5	2.1	2.1		5.38	22.9	22.8	1.97	0.365	4.03	4.24	0.811	0.899	3.41	0.152	12.3	0.316	3.42	5.41	0.29	0.435	2.49	
Benzo(g,h,i)perylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	27,000 <sup>(4)</sup>	1.7	---		2.94	12.4	12.2	0.978	0.176	2.15	2.01	0.402	0.46	1.73	0.077	6.57	0.189	2	2.99	0.206	0.25	1.86	
Benzo(k)fluoranthene	9	78	1,700	---	---	---	---	---	49	1.7	9		1.64	8.76	7.18	0.587	0.117	1.19	1.36	0.299	0.284	0.993	0.043	4.09	0.1	1.09	1.75	0.101	0.135	0.796	
Bis(2-ethylhexyl)phthalate	46	410	4,100	31,000	31,000	31,000	---	---	3,600	---	---		<8.3	<75.6	<9.47	<4.28	<0.724	<2.31	<4.27	<1.88	<0.912	<4.46	<0.151	<8.98	<1.88	<7.65	<8.17	<0.395	<1.91	<4.26	
Chrysene	88	780	17,000	---	---	---	---	---	160	2.7	88		7.77	30.5	32.2	2.88	0.455	4.96	5.8	1.04	1.24	4.93	0.165	18.3	0.47	4.82	8.15	0.353	0.602	3.85	
Dibenzo(a,h)anthracene	0.09	0.80	17	---	---	---	---	---	2	0.42	0.42		0.806	<3.83	3.44	0.27	0.044	0.591	0.548	0.153	0.131	0.47	0.021	1.82	<0.096	0.487	0.792	0.048	<0.097	0.441	
Fluoranthene	3,100	82,000	82,000	---	---	---	---	---	4,300	4.1	---		15.8	67.3	75	6.67	0.984	9.62	12.7	2.26	2.92	10.4	0.336	38.4	1.25	10.3	21.5	0.567	1.27	8.46	
Fluorene	3,100	82,000	82,000	---	---	---	---	---	560	0.18	3,100		20.1	59.4	80.5	9.42	0.865	9.68	13.6	2.67	3.26	11.5	0.295	52.8	1.25	10	21.6	0.504	1.46	5.11	
Indeno(1,2,3-cd)pyrene	0.90	8.00	170	---	---	---	---	---	14	1.6	1.6		2.4	9.47	9.83	0.791	<0.037	1.75	1.6	0.346	0.386	1.41	0.064	5.38	0.153	1.49	2.39	0.149	0.191	1.31	
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	0.2	1.8		92.7	664	544	37.1	4.41	18.8	70	12.9	16.3	62.1	0.485	287	8.59	70.3	58.2	8.47	5.66	0.613	
Phenanthrene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	200 <sup>(4)</sup>	2.5	2,300		50.1	178	240	22.4	2.77	28.8	42.4	6.83	9.85	34.6	0.772	131	3.07	32.1	55.1	1.57	3.92	17	
Pyrene	2,300	61,000	61,000	---	---	---	---	---	4,200	3	---		22.5	98.9	110	9.96	1.49	13.8	18.3	3.4	4.01	14.9	0.48	58.3	1.39	15.5	25	0.666	1.89	10.7	

Notes:  
<sup>(1)</sup> Objective is for m-xylene  
<sup>(2)</sup> Objective is for p-xylene  
<sup>(3)</sup> Objectives are for Class I groundwater.  
<sup>(4)</sup> Non-TACO or provisional ROs provided by the IEPA.  
 --- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.  
 Concentration exceeds one or more project remediation objective.



Table 5-1  
Soil Confirmation Sample Analytical Results For Excavation Wall - BTEX and PNAs  
Champaign Former MGP Site  
Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component to Groundwater <sup>(3)</sup>	EPA Accepted Background Levels for MSA	Project Remediation Objectives	Sample Location: Sample ID: Sample Date: Sample Depth (feet):	P5-A5-W	P5-A5-W(20)	P5-C5-W	P5-C5-W (8)	P5-C5-W (20)	P6-A4.5-W	P6-A4.5-W (8)	P6-A5.5-W	P6-A5.5-W (21)	P6-B5.5-W	P6-BC5.5-W	P6-CD5.5-W	P6-D5.5-W	P6-D5.5-W (8)	P6-D5.5-W (20)	P6-DE5.5-W
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial					P5-A5-W (8)	P5-A5-W (20)	P5-C5-W (3)	P5-C5-W (8)	P5-C5-W (20)	P6-A4.5-W (3)	P6-A4.5-W (8)	P6-A5.5-W (8)	P6-A5.5-W (21)	P6-B5.5-W (20)	P6-BC5.5-W (20)	P6-CD5.5-W (8)	P6-D5.5-W (8)	P6-D5.5-W (20)	P6-DE5.5-W (20)	
<b>BTEX Constituents (mg/kg)</b>																												
Benzene	12	100	2,300	0.8	1.6	2.2	0.069	0.51	0.03	---	0.069	<1.11	16.2	0.0028	<0.0657	33.8	0.0566	<0.123	0.0275	3.04	6.24	<0.0182	<0.691	<0.82	<0.98	0.0705		
Ethylbenzene	7,800	200,000	20,000	400	400	58	130	130	13	---	58	1.5	0.593	0.0016	0.655	1.8	0.561	1.5	0.499	3.95	3.5	<0.0912	1.2	3	<4.9	0.061		
Toluene	16,000	410,000	410,000	650	650	42	240	240	12	---	42	<5.55	8.19	0.0014	<0.329	59.9	0.044	<0.616	0.032	15.8	18.4	0.037	<3.45	<4.1	<4.9	0.082		
m,p-Xylenes	16,000	410,000	41,000	420 <sup>(1)</sup>	420 <sup>(1)</sup>	5.9 <sup>(2)</sup>	75 <sup>(2)</sup>	120 <sup>(2)</sup>	200 <sup>(2)</sup>	---	---	<5.55	1.95	0.0013	<0.329	9.9	0.052	0.16	0.246	9.55	9.51	0.02	1.5	<4.1	<4.9	0.129		
o-Xylene	16,000	410,000	41,000	410	410	6.5	98	140	190	---	---	<5.55	0.9	<0.0051	0.15	4.57	0.216	1.54	0.777	4.44	4.48	<0.0912	2.6	1.7	<4.9	0.056		
Xylenes	16,000	410,000	41,000	320	320	5.6	63	100	150	---	5.6	<5.55	2.85	0.0013	0.15	14.47	0.268	1.7	1.023	13.99	13.99	0.02	4.1	1.7	<4.9	0.185		
<b>PNA Constituents (mg/kg)</b>																												
Acenaphthene	4,700	120,000	120,000	---	---	---	---	---	570	0.13	4,700	3.85	1.07	<0.447	4.65	0.158	17.6	3.25	0.375	7.59	0.539	0.47	1.41	0.25	7.14	0.015		
Acenaphthylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	85 <sup>(4)</sup>	0.07	2,300	1.35	6.69	0.833	0.753	0.202	1.64	2.77	0.358	16.2	2.63	1.32	0.209	0.048	1.06	0.009		
Anthracene	23,000	610,000	610,000	---	---	---	---	---	12,000	0.4	---	2.89	4.19	<0.447	4.23	0.183	8.84	5.49	0.297	12.7	1.81	0.78	0.708	0.051	4.09	0.006		
Benzo(a)anthracene	0.90	8	170	---	---	---	---	---	2	1.8	2	1.99	2.37	2.46	2.39	0.149	4.11	3.73	0.144	7.36	1.04	0.56	0.435	0.032	3.52	0.008		
Benzo(a)pyrene	0.09	0.80	17	---	---	---	---	---	8	2.1	2.1	2.34	2.29	2.68	2.24	0.135	3.81	3.91	0.161	6.88	0.938	0.554	2.88	0.036	3.51	0.008		
Benzo(b)fluoranthene	0.90	8	170	---	---	---	---	---	5	2.1	2.1	1.8	1.72	2.66	1.55	0.112	2.96	2.75	0.124	5.09	0.729	0.457	1.98	0.041	2.96	0.008		
Benzo(g,h,i)perylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	27,000 <sup>(4)</sup>	1.7	---	1.7	1.1	1.9	1.03	0.076	1.67	1.82	0.081	3.11	0.435	0.249	1.37	0.013	1.87	0.008		
Benzo(k)fluoranthene	9	78	1,700	---	---	---	---	---	49	1.7	9	0.565	0.543	0.934	0.566	0.037	0.868	0.833	0.039	1.46	0.206	0.134	0.639	0.014	0.921	<0.004		
Bis(2-ethylhexyl)phthalate	46	410	4,100	31,000	31,000	31,000	---	---	3,600	---	---	<8.67	<3.98	<8.81	<3.83	<0.76	<2.17	<1.88	<0.08	<11.5	<1.85	<0.375	<0.078	<0.077	<8.23	<0.075		
Chrysene	88	780	17,000	---	---	---	---	---	160	2.7	88	1.61	2.34	2.46	2.28	0.144	4.11	3.74	0.149	6.99	0.965	0.535	0.44	0.035	3.51	0.007		
Dibenzo(a,h)anthracene	0.09	0.80	17	---	---	---	---	---	2	0.42	0.42	<0.44	0.253	0.456	0.24	<0.039	0.419	0.426	0.02	0.774	0.107	0.057	0.29	<0.004	0.41	<0.004		
Fluoranthene	3,100	82,000	82,000	---	---	---	---	---	4,300	4.1	---	4.35	4.75	3.21	5.81	0.321	9.92	7.05	0.332	15.5	2.27	1.28	0.891	0.063	5.14	0.012		
Fluorene	3,100	82,000	82,000	---	---	---	---	---	560	0.18	3,100	3.27	3.96	<0.447	4.02	0.178	9.2	6.67	0.348	13.9	2.02	0.819	0.814	0.085	4.0	0.007		
Indeno(1,2,3-cd)pyrene	0.90	8.00	170	---	---	---	---	---	14	1.6	1.6	1.21	0.786	1.51	0.758	0.057	1.28	1.32	0.062	2.39	0.33	0.175	0.907	0.009	1.39	0.004		
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	0.2	1.8	4.11	18.6	<0.447	8.16	4.15	4.57	31.7	3.78	112	15.2	5.36	33	27.8	7.83	0.151		
Phenanthrene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	200 <sup>(4)</sup>	2.5	2,300	9.43	13.5	0.658	14	0.671	29.5	17.9	1.02	42.8	6.01	3.1	17.6	0.196	14.5	0.022		
Pyrene	2,300	61,000	61,000	---	---	---	---	---	4,200	3	---	5.47	7.27	3.47	6.99	0.376	13.6	11	0.489	24	3.37	1.75	1.2	0.088	9.28	0.017		

Notes:

<sup>(1)</sup> Objective is for m-xylene

<sup>(2)</sup> Objective is for p-xylene

<sup>(3)</sup> Objectives are for Class I groundwater.

<sup>(4)</sup> Non-TACO or provisional ROs provided by the IEPA.

--- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.

Concentration exceeds one or more project remediation objective.

Table 5-1  
Soil Confirmation Sample Analytical Results For Excavation Wall - BTEX and PNAs  
Champaign Former MGP Site  
Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component to Groundwater <sup>(2)</sup>	IEPA Accepted Background Levels for MSA	Project Remediation Objectives	Sample Location: Sample ID: Sample Date: Sample Depth (feet):	P6-E5.5-W	P7-B1-SW	P7-BC1-SW	P7-BC1-SW	P7-C1-SW	P7-C1-SW	P7-CD1-SW	P7-CD1-SW	P7-D1-W	P7-D1-W	P7-DE1-W	P7-DE1-W	P8-H1-W	P8-H3-W	P8-H4-W	P9-D1-W
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial					10/21/2010	2/15/2011	2/15/2011	2/15/2011	2/15/2011	2/15/2011	2/15/2011	2/15/2011	2/17/2011	2/17/2011	3/2/2011	3/2/2011	3/2/2011	3/2/2011	3/2/2011	4/6/2011
<b>BTEX Constituents (mg/kg)</b>																												
Benzene	12	100	2,300	0.8	1.6	2.2	0.069	0.51	0.03	---	0.069		1.72	<1.12	<0.0227	<0.9	<0.886	3.72	<0.774	1.25	<0.0252	28.2	<0.0243	2.78	0.0433	0.0445	0.0498	<1.74
Ethylbenzene	7,800	200,000	20,000	400	400	58	130	130	13	---	58		<0.117	13.9	0.089	4.84	26	<3.86	17	16.9	0.968	63.6	0.759	4.08	0.093	<0.12	1.02	130
Toluene	16,000	410,000	410,000	650	650	42	240	240	12	---	42		0.313	<5.62	<0.113	<4.5	<4.43	1.1	<3.87	1.5	0.082	9.27	0.078	0.28	0.031	<0.12	0.032	3.4
m,p-Xylenes	16,000	410,000	41,000	420 <sup>(1)</sup>	420 <sup>(1)</sup>	5.9 <sup>(2)</sup>	75 <sup>(2)</sup>	120 <sup>(2)</sup>	200 <sup>(2)</sup>	---	---		0.034	5.6	<0.113	<4.5	4.63	<3.86	3.1	10.9	0.137	78.4	0.125	3.48	0.415	<0.12	0.11	141
o-Xylene	16,000	410,000	41,000	410	410	6.5	98	140	190	---	---		<0.117	8.85	0.03	1.3	10.3	<3.86	4.8	8.62	0.395	50.4	0.365	2.98	0.185	<0.12	0.527	88.2
Xylenes	16,000	410,000	41,000	320	320	5.6	63	100	150	---	5.6		0.034	14.45	0.03	1.3	14.93	<3.86	7.9	19.52	0.532	128.8	0.49	6.46	0.6	<0.12	0.637	229.2
<b>PNA Constituents (mg/kg)</b>																												
Acenaphthene	4,700	120,000	120,000	---	---	---	---	---	570	0.13	4,700		0.003	53.6	4.7	15.4	34.3	2.59	22.6	40.2	1.71	4.8	1.61	10.6	1.93	0.637	35.6	0.827
Acenaphthylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	85 <sup>(4)</sup>	0.07	2,300		0.005	8.95	1.37	3.25	3.35	0.512	2.14	5.91	2.89	2.01	2.73	3.85	<0.419	0.07	3.01	1.05
Anthracene	23,000	610,000	610,000	---	---	---	---	---	12,000	0.4	---		<0.004	31.2	3.83	9.43	19.5	1.32	11.1	25.4	1.17	7.1	0.981	14.8	1.03	0.36	17.6	2.09
Benzo(a)anthracene	0.90	8	170	---	---	---	---	---	2	1.8	2		0.003	19.5	2.66	6.54	10.7	0.833	5.57	15.3	0.421	6	0.313	8.5	0.617	0.16	8.32	0.993
Benzo(a)pyrene	0.09	0.80	17	---	---	---	---	---	8	2.1	2.1		<0.004	21.3	3.2	7.19	9.81	0.893	5.35	15.5	3.01	5.63	2.74	8.55	<0.419	0.13	7.04	0.962
Benzo(b)fluoranthene	0.90	8	170	---	---	---	---	---	5	2.1	2.1		<0.004	17.2	2.64	5.45	7.93	0.736	4.14	11.7	2.3	4.96	2.03	7.38	<0.419	0.113	5.75	0.862
Benzo(g,h,i)perylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	27,000 <sup>(4)</sup>	1.7	---		0.004	10.1	1.44	2.88	3.2	0.489	2.54	7.62	2.82	1.51	2.57	2.12	<0.419	0.055	2.35	0.282
Benzo(k)fluoranthene	9	78	1,700	---	---	---	---	---	49	1.7	9		<0.004	4.84	0.703	1.56	2.28	0.215	1.22	3.66	0.523	1.59	0.522	2.19	<0.419	0.041	1.78	0.29
Bis(2-ethylhexyl)phthalate	46	410	4,100	31,000	31,000	31,000	---	---	3,600	---	---		<0.073	<4.24	<0.849	<3.89	<7.99	<1.86	<1.95	<22.2	<2.06	<1.89	<2.1	<1.9	<8.27	<0.084	<2.07	<0.411
Chrysene	88	780	17,000	---	---	---	---	---	160	2.7	88		0.004	20.6	2.78	6.39	10.6	0.888	5.4	15	1.37	5.9	1.34	9	0.37	0.147	8.13	0.937
Dibenzo(a,h)anthracene	0.09	0.80	17	---	---	---	---	---	2	0.42	0.42		<0.004	2.34	0.379	0.696	0.886	0.099	0.578	1.58	0.452	0.386	0.407	0.558	<0.419	0.016	0.649	0.078
Fluoranthene	3,100	82,000	82,000	---	---	---	---	---	4,300	4.1	---		0.003	40.5	5.53	14.2	23.2	1.79	11.9	32.8	0.421	9.5	0.365	19.6	0.905	0.382	16.8	2.15
Fluorene	3,100	82,000	82,000	---	---	---	---	---	560	0.18	3,100		0.003	30.8	3.92	10.2	19.4	1.39	11.9	25.4	1.8	7.4	1.65	14.9	1.36	0.27	18.4	1.93
Indeno(1,2,3-cd)pyrene	0.90	8.00	170	---	---	---	---	---	14	1.6	1.6		<0.004	7.64	1.27	2.24	2.69	0.353	1.89	5.42	2.34	1.23	2.15	1.76	<0.419	0.045	1.99	0.233
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	0.2	1.8		0.162	36.6	0.319	30	49.9	6.13	46.5	104	1.3	113	1.41	152	6.25	0.018	1.89	45.3
Phenanthrene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	200 <sup>(4)</sup>	2.5	2,300		0.015	104	12.9	31.6	67.6	4.76	36.5	87.3	1.58	28.8	1.33	63.3	4.44	1.34	55	5.64
Pyrene	2,300	61,000	61,000	---	---	---	---	---	4,200	3	---		0.007	65.6	8.75	22.2	34.3	2.87	18.8	50.2	2	14	1.84	31.4	1.4	0.536	24.9	3.22

Notes:  
<sup>(1)</sup> Objective is for m-xylene  
<sup>(2)</sup> Objective is for p-xylene  
<sup>(3)</sup> Objectives are for Class I groundwater.  
<sup>(4)</sup> Non-TACO or provisional ROs provided by the IEPA.  
 --- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.  
 Concentration exceeds one or more project remediation objective.



TABLE 5-2  
Soil Confirmation Sample Analytical Results For Excavation Wall - VOCs  
Champaign Former MGP  
Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component to Groundwater <sup>(1)</sup>	Project Remediation Objectives	Sample Location:												
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial			Sample ID:	P1-A1-W	P1-A1-W	P1-A1-W	P1-A2-W	P1-A2-W	P1-A2-W	P1-A3-W	P1-A3-W	P1-A3-W	P1-A4-W	P1-A4-W	P1-A4-W
											Sample Date:	6/30/2009	6/30/2009	7/14/2009	6/30/2009	6/30/2009	7/6/2009	7/7/2009	7/7/2009	7/7/2009	7/7/2009	7/7/2009	7/7/2009
Hexachloroethane	78	2,000	2,000	---	---	---	160	160	0.5	---	<0.831	<5.48	<5.720	<5.76	<7.34	<2.14	<97.7	<1.540	<6.72	<0.16	<1.35	<2.38	
Iodomethane	---	---	---	---	---	---	---	---	---	---	<1.660	<11	<11.4	<11.5	<14.7	<4.29	<195	<3.08	<13.4	<0.319	<2.7	<4.76	
Isopropylbenzene (cumene)	7,800 <sup>(2)</sup>	200,000 <sup>(2)</sup>	61,000 <sup>(2)</sup>	500 <sup>(2)</sup>	790 <sup>(2)</sup>	51 <sup>(2)</sup>	21	130	91 <sup>(2)</sup>	---	<0.831	2.5	<5.720	2.1	2.6	<2.14	<97.7	<1.540	<6.72	0.099	<1.35	<2.38	
Methacrylonitrile	---	---	---	---	---	---	---	---	---	---	<8.310	<54.8	<57.2	<57.6	<73.4	<21.4	<97.7	<15.4	<67.2	<1.6	<13.5	<23.8	
Methyl Methacrylate	---	---	---	---	---	---	---	---	---	---	<0.831	<5.48	<5.720	<5.76	<7.34	<2.14	<97.7	<1.540	<6.72	<0.16	<1.35	<2.38	
Methyl tert-butyl ether	780	20,000	2,000	8,800	8,800	140	2,900	6,300	0.32	---	<0.332	<2.19	<2.290	<2.3	<2.94	<0.858	<39.1	<0.617	<2.690	<0.639	<0.541	<0.952	
Methylacrylate	2,300 <sup>(2)</sup>	61,000 <sup>(2)</sup>	6,100 <sup>(2)</sup>	6,500 <sup>(2)</sup>	6,500 <sup>(2)</sup>	6,500 <sup>(2)</sup>	---	---	0.89 <sup>(2)</sup>	---	<1.660	<11	<11.4	<11.5	<14.7	<4.29	<195	<3.08	<13.4	<0.319	<2.7	<4.76	
Methylene chloride (dichloromethane)	85	760	12,000	13	24	34	1.4	10	0.02	1.4	<0.831	<5.48	<5.720	<5.76	<7.34	<2.14	<97.7	<1.540	<6.72	<0.16	<1.35	<2.38	
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	1.8	13.8	422	151	256	402	59.6	1450	21.1	205	12.6	<50.9	101	
n-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<0.831	4.7	<5.720	4.6	5.0	<2.14	40.0	<0.54	<6.72	0.197	0.62	<2.38	
n-Hexane	---	---	---	290 <sup>(2)</sup>	290 <sup>(2)</sup>	15 <sup>(2)</sup>	---	---	---	---	<3.320	<21.9	<22.9	<23	<29.4	<8.58	<391	<6.17	<26.9	<0.639	<5.41	<9.52	
Nitrobenzene	39	1,000	1,000	92	140	9.4	140	380	0.1	---	<16.60	<110	<11.4	<115	<147	<42.9	<1950	<30.8	<134	<3.19	<27	<47.6	
n-Propylbenzene	---	---	---	---	---	---	---	---	---	---	<0.831	<5.48	<5.720	<5.76	<7.34	<2.14	<97.7	<1.540	<6.72	0.09	<1.35	<2.38	
Pentachloroethane	---	---	---	---	---	---	---	---	---	---	<0.831	<5.48	<5.720	<5.76	<7.34	<2.14	<97.7	<1.540	<6.72	<0.16	<1.35	<2.38	
p-Isopropyltoluene	---	---	---	---	---	---	---	---	---	---	<0.831	1.3	<5.720	<5.76	<7.34	<2.14	<97.7	<1.540	<6.72	0.057	<1.35	<2.38	
Propionitrile	---	---	---	---	---	---	---	---	---	---	<8.310	<54.8	<57.2	<57.6	<73.4	<21.4	<97.7	<15.4	<67.2	<1.6	<13.5	<23.8	
sec-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<0.831	<5.48	<5.720	<5.76	<7.34	1.6	<97.7	<1.540	6.7	<0.16	<1.35	<2.38	
Styrene	16,000	410,000	41,000	1,500	1,500	430	230	230	4	230	<0.831	<5.48	<5.720	<5.76	<7.34	<2.14	<97.7	<1.540	<6.72	<0.16	<1.35	1.7	
tert-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<0.831	<5.48	<5.720	<5.76	<7.34	<2.14	<97.7	<1.540	<6.72	<0.16	<1.35	<2.38	
Tetrachloroethene	12	110	2,400	11	20	28	0.24	1.7	0.06	---	<0.831	<5.48	<5.720	<5.76	<7.34	<2.14	<97.7	<1.540	<6.72	<0.16	<1.35	<2.38	
Tetrahydrofuran	---	---	---	---	---	---	---	---	---	---	<8.310	<54.8	<57.2	<57.6	<73.4	<21.4	<97.7	<15.4	<67.2	<1.6	<13.5	<23.8	
trans-1,2-Dichloroethene	1,600	41,000	41,000	3,100	3,100	3,100	---	---	0.7	---	<0.831	<5.48	<5.720	<5.76	<7.34	<2.14	<97.7	<1.540	<6.72	<0.16	<1.35	<2.38	
trans-1,3-Dichloropropene	6.4	57	1,200	1.1	2.1	0.39	---	---	0.004	---	<0.665	<4.38	<4.570	<4.61	<5.88	<1.72	<78.2	<1.23	<5.38	<0.128	<1.08	<1.9	
Trichloroethene	58	520	1,200	5	8.9	12	0.26	1.9	0.06	---	<0.831	<5.48	<5.720	<5.76	<7.34	<2.14	<97.7	<1.540	<6.72	<0.16	<1.35	<2.38	
Trichlorofluoromethane	23,000 <sup>(2)</sup>	610,000 <sup>(2)</sup>	140,000 <sup>(2)</sup>	850 <sup>(2)</sup>	1,400 <sup>(2)</sup>	88 <sup>(2)</sup>	31	190	34 <sup>(2)</sup>	---	<0.831	<5.48	<5.720	<5.76	<7.34	<2.14	<97.7	<1.540	<6.72	<0.16	<1.35	<2.38	
Vinyl acetate	78,000	1,000,000	200,000	1,000	1,600	10	270	1,600	170 <sup>(2)</sup>	---	<8.310	<54.8	<57.2	<57.6	<73.4	<21.4	<97.7	<15.4	<67.2	<1.6	<13.5	<23.8	
Vinyl chloride	0.46	7.9	170	0.28	1.1	1.1	0.011	0.15	0.01	---	<0.332	<2.19	<2.290	<2.3	<2.94	<0.858	<39.1	<0.617	<2.69	<0.639	<0.541	<0.952	

Notes:

<sup>(1)</sup> Objectives are for Class I Groundwater.

<sup>(2)</sup> Non-TACO or provisional ROs provided by the IEPA.

--- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.

Concentration exceeds one or more project remediation objective.



TABLE 5-2  
Soil Confirmation Sample Analytical Results For Excavation Wall - VOCs  
Champaign Former MGP  
Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component to Groundwater <sup>(1)</sup>	Project Remediation Objectives	Sample Location:		P1-A5-W	P1-A5-W	P2-A1-W	P2-A1-W	P2-A1-W	P2-A2-W	P2-A2-W	P2-A3-W	P2-A3-W	P2-A3-W	P3-A1-W	P3-A1-W	P3-A1-W	P3-A2-W	P3-A3-W	P3-A3-W
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial			Sample ID:	P1-A5-W(3)	P1-A5-W(8)	P2-A1-W (3)	P2-A1-W (8)	P2-A1-W (20)	P2-A2-W (3)	P2-A2-W (8)	P2-A3-W (3)	P2-A3-W (8)	P2-A3-W (20)	P3-A1-W (3)	P3-A1-W (10)	P3-A1-W (15)	P3-A2-W (8)	P3-A3-W (3)	P3-A3-W (6)	
	Sample Date:	7/15/2009	7/15/2009	10/23/2009	10/23/2009	10/27/2009	10/27/2009	10/27/2009			10/26/2009	10/26/2009	10/27/2009	1/12/2010	1/12/2010	1/12/2010	1/12/2010	1/12/2010	1/12/2010	1/12/2010	1/12/2010	1/12/2010	1/12/2010	1/12/2010	1/12/2010	1/12/2010	1/12/2010	1/12/2010
Hexachloroethane	78	2,000	2,000	---	---	---	160	160	0.5	---	<5.17	<4.16	<20	<5.69	<0.966	<1.1	<0.63	<4.95	<4.54	<9.75	<6.82	<5.12	<0.443	<6.33	<0.485	<0.137		
Iodomethane	---	---	---	---	---	---	---	---	---	---	<10.3	<8.33	<40.1	<11.4	<1.93	<2.2	<1.26	<9.9	<9.08	<19.5	<13.6	<10.2	<0.885	<12.7	<0.971	<0.274		
Isopropylbenzene (cumene)	7,800 <sup>(2)</sup>	200,000 <sup>(2)</sup>	61,000 <sup>(2)</sup>	500 <sup>(2)</sup>	790 <sup>(2)</sup>	51 <sup>(2)</sup>	21	130	91 <sup>(2)</sup>	---	<2.9	<1.9	<20	<5.69	<0.966	<1.1	<0.63	1	1.9	<9.75	<6.82	<5.12	0.24	<6.33	0.19	0.169		
Methacrylonitrile	---	---	---	---	---	---	---	---	---	---	<51.7	<41.6	<200	<56.9	<9.66	<11	<6.3	<49.5	<45.4	<97.5	<68.2	<51.2	<4.43	<63.3	<4.85	<1.37		
Methyl Methacrylate	---	---	---	---	---	---	---	---	---	---	<5.17	<4.16	<20	<5.69	<0.966	<1.1	<0.63	<4.95	<4.54	<9.75	<6.82	<5.12	<0.443	<6.33	<0.485	<0.137		
Methyl tert-butyl ether	780	20,000	2,000	8,800	8,800	140	2,900	6,300	0.32	---	<2.07	<1.67	<8.01	<2.27	<0.386	<0.44	<0.252	<1.98	<1.82	<3.9	<2.73	<2.05	<0.177	<2.53	<0.194	<0.0548		
Methylacrylate	2,300 <sup>(2)</sup>	61,000 <sup>(2)</sup>	6,100 <sup>(2)</sup>	6,500 <sup>(2)</sup>	6,500 <sup>(2)</sup>	6,500 <sup>(2)</sup>	---	---	0.89 <sup>(2)</sup>	---	<10.3	<8.33	<40.1	<11.4	<1.93	<2.2	<1.26	<9.9	<9.08	<19.5	<13.6	<10.2	<0.885	<12.7	<0.971	<0.274		
Methylene chloride (dichloromethane)	85	760	12,000	13	24	34	1.4	10	0.02	1.4	<5.17	<4.16	<20	<5.69	<0.966	<1.1	<0.63	<4.95	<4.54	4.4	<6.82	<5.12	<0.443	<6.33	<0.485	<0.137		
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	1.8	357	321	500	93	33.2	28.8	13.4	116	181	181	149	357	122	32.3	218	10.8		
n-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<12.3	3.9	<20	<5.69	<0.966	<1.1	<0.63	<4.95	<4.54	<9.75	<6.82	<5.12	<0.443	<6.33	<0.485	<0.137		
n-Hexane	---	---	---	290 <sup>(2)</sup>	290 <sup>(2)</sup>	15 <sup>(2)</sup>	---	---	---	---	<20.7	<16.7	<80.1	<22.7	<3.86	<4.4	<2.52	<19.8	<18.2	<39	<27.3	<20.5	<1.77	<25.3	<1.94	<0.548		
Nitrobenzene	39	1,000	1,000	92	140	9.4	140	380	0.1	---	<103	<83.3	<401	<114	<19.3	<22	<12.6	<99	<90.8	<195	<136	<102	<8.85	<12.7	<9.71	<2.74		
n-Propylbenzene	---	---	---	---	---	---	---	---	---	---	<5.17	<4.16	<20	<5.69	<0.966	<1.1	<0.63	<4.95	<4.54	<9.75	<6.82	<5.12	0.19	<6.33	0.24	0.048		
Pentachloroethane	---	---	---	---	---	---	---	---	---	---	<5.17	<4.16	<20	<5.69	<0.966	<1.1	<0.63	<4.95	<4.54	<9.75	<6.82	<5.12	<0.443	<6.33	<0.485	<0.137		
p-Isopropyltoluene	---	---	---	---	---	---	---	---	---	---	1.3	0.92	<20	<5.69	<0.966	<1.1	<0.63	<4.95	<4.54	<9.75	<6.82	<5.12	<0.443	<6.33	<0.485	<0.137		
Propionitrile	---	---	---	---	---	---	---	---	---	---	<51.7	<41.6	<200	<56.9	<9.66	<11	<6.3	<49.5	<45.4	<97.5	<68.2	<51.2	<4.43	<63.3	<4.85	<1.37		
sec-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<5.17	<4.16	<20	<5.69	<0.966	<1.1	<0.63	<4.95	<4.54	<9.75	<6.82	<5.12	<0.443	<6.33	<0.485	<0.137		
Styrene	16,000	410,000	41,000	1,500	1,500	430	230	230	4	230	<5.17	<4.16	<20	<5.69	<0.966	<1.1	<0.63	<4.95	<4.54	<9.75	<6.82	<5.12	0.679	<6.33	2.11	0.03		
tert-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<5.17	<4.16	<20	<5.69	<0.966	<1.1	<0.63	<4.95	<4.54	<9.75	<6.82	<5.12	<0.443	<6.33	<0.485	<0.137		
Tetrachloroethene	12	110	2,400	11	20	28	0.24	1.7	0.06	---	<5.17	<4.16	<20	<5.69	<0.966	<1.1	<0.63	<4.95	<4.54	<9.75	<6.82	<5.12	<0.443	<6.33	<0.485	<0.137		
Tetrahydrofuran	---	---	---	---	---	---	---	---	---	---	<51.7	<41.6	<200	<56.9	<9.66	<11	<6.3	<49.5	<45.4	<97.5	<68.2	<51.2	<4.43	<63.3	<4.85	<1.37		
trans-1,2-Dichloroethene	1,600	41,000	41,000	3,100	3,100	3,100	---	---	0.7	---	<5.17	<4.16	<20	<5.69	<0.966	<1.1	<0.63	<4.95	<4.54	<9.75	<6.82	<5.12	<0.443	<6.33	<0.485	<0.137		
trans-1,3-Dichloropropene	6.4	57	1,200	1.1	2.1	0.39	---	---	0.004	---	<4.14	<3.33	<16	<4.55	<0.773	<0.88	<0.504	<3.96	<3.63	<7.8	<5.45	<4.09	<0.354	<5.06	<0.388	<0.11		
Trichloroethene	58	520	1,200	5	8.9	12	0.26	1.9	0.06	---	<5.17	<4.16	<20	<5.69	<0.966	<1.1	<0.63	<4.95	<4.54	<9.75	<6.82	<5.12	<0.443	<6.33	<0.485	<0.137		
Trichlorofluoromethane	23,000 <sup>(2)</sup>	610,000 <sup>(2)</sup>	140,000 <sup>(2)</sup>	850 <sup>(2)</sup>	1,400 <sup>(2)</sup>	88 <sup>(2)</sup>	31	190	34 <sup>(2)</sup>	---	<5.17	<4.16	<20	<5.69	<0.966	<1.1	<0.63	<4.95	<4.54	<9.75	<6.82	<5.12	<0.443	<6.33	<0.485	<0.137		
Vinyl acetate	78,000	1,000,000	200,000	1,000	1,600	10	270	1,600	170 <sup>(2)</sup>	---	<51.7	<41.6	<200	<56.9	<9.66	<11	<6.3	<49.5	<45.4	<97.5	<68.2	<51.2	<4.43	<63.3	<4.85	<1.37		
Vinyl chloride	0.46	7.9	170	0.28	1.1	1.1	0.011	0.15	0.01	---	<2.07	<1670	<8.01	<2.27	<0.386	<0.44	<0.252	<1.98	<1.82	<3.9	<2.73	<2.05	<0.177	<2.53	<0.194	<0.0548		

Notes:  
<sup>(1)</sup> Objectives are for Class I Groundwater.  
<sup>(2)</sup> Non-TACO or provisional ROs provided by the IEPA.  
 --- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.  
 Concentration exceeds one or more project remediation objective.



TABLE 5-2  
Soil Confirmation Sample Analytical Results For Excavation Wall - VOCs  
Champaign Former MGP  
Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component to Groundwater <sup>(1)</sup>	Project Remediation Objectives	Sample Location:	P3-A4-W	P3-A4-W	P3-B.5-W	P3-B.5-W	P3-C1-W	P3-C1-W	P3-A.5-W	P3-A.5-W	P3-B-W	P3-B-W	P3-C.5-W	P3-C.5-W	P3-D-W	P3-D.5-W	P3-D.5-W	
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial			Sample ID:	P3-A4-W (3)	P3-A4-W (10)	P3-B.5-W (8)	P3-B.5-W (15)	P3-C1-W (10)	P3-C1-W (18)	P3-A.5-W (8)	P3-A.5-W (20)	P3-B-W (8)	P3-B-W (20)	P3-C.5-W (8)	P3-C.5-W (20)	P3-D-W (8)	P3-D.5-W (8)	P3-D.5-W (8)	P3-D.5-W (20)
	Sample Date:	1/13/2010	1/13/2010	1/14/2010	1/14/2010	1/14/2010	1/14/2010	1/14/2010			Sample Depth (feet):	3	10	8	15	10	18	8	20	8	20	8	20	8	20	8	8
Hexachloroethane	78	2,000	2,000	---	---	---	160	160	0.5	---	<0.157	<5.02	<26.1	<20.5	<23.1	<41.6	<26	<3.26	<27.2	<20.9	<4.52	<27.2	<28.4	<4.53	<5.1		
Iodomethane	---	---	---	---	---	---	---	---	---	---	<0.314	<10	<52.2	<41	<46.2	<83.2	<51.9	<6.53	<54.4	<41.8	<9.04	<54.4	<56.8	<9.06	<10.2		
Isopropylbenzene (cumene)	7,800 <sup>(2)</sup>	200,000 <sup>(2)</sup>	61,000 <sup>(2)</sup>	500 <sup>(2)</sup>	790 <sup>(2)</sup>	51 <sup>(2)</sup>	21	130	91 <sup>(2)</sup>	---	0.936	<5.02	<26.1	<20.5	<23.1	<41.6	<26	<3.26	<27.2	<20.9	<4.52	<27.2	<28.4	<4.53	2.7		
Methacrylonitrile	---	---	---	---	---	---	---	---	---	---	<1.57	<50.2	<261	<205	<231	<416	<260	<32.6	<272	<209	<45.2	<272	<284	<45.3	<51		
Methyl Methacrylate	---	---	---	---	---	---	---	---	---	---	<0.157	<5.02	<26.1	<20.5	<23.1	<41.6	<26	<3.26	<27.2	<20.9	<4.52	<27.2	<28.4	<4.53	<5.1		
Methyl tert-butyl ether	780	20,000	2,000	8,800	8,800	140	2,900	6,300	0.32	---	<0.0628	<2.01	<10.4	<8.21	<9.23	<16.6	<10.4	<1.31	<10.9	<8.36	<1.81	<10.9	<11.4	<1.81	<2.04		
Methylacrylate	2,300 <sup>(2)</sup>	61,000 <sup>(2)</sup>	6,100 <sup>(2)</sup>	6,500 <sup>(2)</sup>	6,500 <sup>(2)</sup>	6,500 <sup>(2)</sup>	---	---	0.89 <sup>(2)</sup>	---	<0.314	<10	<52.2	<41	<46.2	<83.2	<51.9	<6.53	<54.4	<41.8	<9.04	<54.4	<56.8	<9.06	<10.2		
Methylene chloride (dichloromethane)	85	760	12,000	13	24	34	1.4	10	0.02	1.4	<0.157	<5.02	<26.1	<20.5	<23.1	<41.6	5.7	0.82	5.7	<20.9	0.93	<27.2	<28.4	<4.53	<5.1		
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	1.8	40.2	52	906	54.5	3200	1800	246	9.71	211	29	216	130	1000	44.7	549		
n-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<0.157	<5.02	<26.1	<20.5	<23.1	<41.6	<26	<3.26	<27.2	<20.9	1.4	<27.2	<28.4	<4.53	<5.1		
n-Hexane	---	---	---	290 <sup>(2)</sup>	290 <sup>(2)</sup>	15 <sup>(2)</sup>	---	---	---	---	0.28	<20.1	<104	<82.1	<92.3	<166	<104	<13.1	<109	<83.6	<18.1	<109	<114	<18.1	<20.4		
Nitrobenzene	39	1,000	1,000	92	140	9.4	140	380	0.1	---	<3.14	<100	<522	<410	<462	<832	<519	<65.3	<544	<418	<90.4	<544	<568	<90.6	<102		
n-Propylbenzene	---	---	---	---	---	---	---	---	---	---	1.22	<5.02	<26.1	<20.5	<23.1	<41.6	<26	<3.26	<27.2	<20.9	<4.52	<27.2	<28.4	<4.53	1.6		
Pentachloroethane	---	---	---	---	---	---	---	---	---	---	<0.157	<5.02	<26.1	<20.5	<23.1	<41.6	<26	<3.26	<27.2	<20.9	<4.52	<27.2	<28.4	<4.53	<5.1		
p-Isopropyltoluene	---	---	---	---	---	---	---	---	---	---	<0.157	<5.02	<26.1	<20.5	<23.1	<41.6	<26	<3.26	<27.2	<20.9	<4.52	<27.2	<28.4	<4.53	1.3		
Propionitrile	---	---	---	---	---	---	---	---	---	---	<1.57	<50.2	<261	<205	<231	<416	<260	<32.6	<272	<209	<45.2	<272	<284	<45.3	<51		
sec-Butylbenzene	---	---	---	---	---	---	---	---	---	---	0.648	<5.02	<26.1	<20.5	<23.1	<41.6	<26	<3.26	<27.2	<20.9	<4.52	<27.2	<28.4	<4.53	<5.1		
Styrene	16,000	410,000	41,000	1,500	1,500	430	230	230	4	230	<0.157	<5.02	<26.1	<20.5	<23.1	<41.6	<26	<3.26	<27.2	<20.9	<4.52	<27.2	7.4	<4.53	10.7		
tert-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<0.157	<5.02	<26.1	<20.5	<23.1	<41.6	<26	<3.26	<27.2	<20.9	<4.52	<27.2	<28.4	<4.53	<5.1		
Tetrachloroethene	12	110	2,400	11	20	28	0.24	1.7	0.06	---	<0.157	<5.02	<26.1	<20.5	<23.1	<41.6	<26	<3.26	<27.2	<20.9	<4.52	<27.2	<28.4	<4.53	<5.1		
Tetrahydrofuran	---	---	---	---	---	---	---	---	---	---	<1.57	<50.2	<261	<205	<231	<416	<260	<32.6	<272	<209	<45.2	<272	<284	<45.3	<51		
trans-1,2-Dichloroethene	1,600	41,000	41,000	3,100	3,100	3,100	---	---	0.7	---	<0.157	<5.02	<26.1	<20.5	<23.1	<41.6	<26	<3.26	<27.2	<20.9	<4.52	<27.2	<28.4	<4.53	<5.1		
trans-1,3-Dichloropropene	6.4	57	1,200	1.1	2.1	0.39	---	---	0.004	---	<0.126	<4.01	<20.9	<16.4	<18.5	<33.3	<20.8	<2.61	<21.8	<16.7	<3.61	<21.7	<22.7	<3.62	<4.08		
Trichloroethene	58	520	1,200	5	8.9	12	0.26	1.9	0.06	---	<0.157	<5.02	<26.1	<20.5	<23.1	<41.6	<26	<3.26	<27.2	<20.9	<4.52	<27.2	<28.4	<4.53	<5.1		
Trichlorofluoromethane	23,000 <sup>(2)</sup>	610,000 <sup>(2)</sup>	140,000 <sup>(2)</sup>	850 <sup>(2)</sup>	1,400 <sup>(2)</sup>	88 <sup>(2)</sup>	31	190	34 <sup>(2)</sup>	---	<0.157	<5.02	<26.1	<20.5	<23.1	<41.6	<26	<3.26	<27.2	<20.9	<4.52	<27.2	<28.4	<4.53	<5.1		
Vinyl acetate	78,000	1,000,000	200,000	1,000	1,600	10	270	1,600	170 <sup>(2)</sup>	---	<1.57	<50.2	<261	<205	<231	<416	<260	<32.6	<272	<209	<45.2	<272	<284	<45.3	<51		
Vinyl chloride	0.46	7.9	170	0.28	1.1	1.1	0.011	0.15	0.01	---	<0.0628	<2.01	<10.4	<8.21	<9.23	<16.6	<10.4	<1.31	<10.9	<8.36	<1.81	<10.9	<11.4	<1.81	<2.04		

Notes:

<sup>(1)</sup> Objectives are for Class I Groundwater.

<sup>(2)</sup> Non-TACO or provisional ROs provided by the IEPA.

--- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.

Concentration exceeds one or more project remediation objective.





TABLE 5-2  
Soil Confirmation Sample Analytical Results For Excavation Wall - VOCs  
Champaign Former MGP  
Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component to Groundwater <sup>(1)</sup>	Project Remediation Objectives	Sample Location:		P3-E-W	P3-E-W	P3-E.5-W	P3-E.5-W	P3-F-W	P3-F-W	P3-A1.5-W	P3-A1.5-W	P3-A2.5-W	P3-A2.5-W	P3-A2.5-W	P3-A2.5-W	P3-F.5-W	P3-F.5-W	P3-F.5-W	P3-G-W
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial			Sample ID:	P3-E-W (8)	P3-E-W (20)	P3-E.5-W (8)	P3-E.5-W (20)	P3-F-W (8)	P3-F-W (20)	P3-A1.5-W (8)	P3-A1.5-W (20)	P3-A2.5-W (3)	P3-A2.5-W (8)	P3-A2.5-W (20)	P3-A2.5-W (20)	P3-F.5-W (3)	P3-F.5-W (8)	P3-F.5-W (20)	P3-F.5-W (20)	P3-G-W (3)
	Sample Date:	1/27/2010	1/27/2010	1/27/2010	1/27/2010	1/27/2010	1/27/2010	1/27/2010			Sample Depth (feet):	8	20	8	20	8	20	8	20	3	8	20	3	8	20	3	8	20
Hexachloroethane	78	2,000	2,000	---	---	---	160	160	0.5	---	<4.25	<2.09	<31.8	<2.45	<2.28	<4.66	<5.12	<4.33	<0.161	<5.34	<4.3	<5.99	<4.64	<4.08	<6.36			
Iodomethane	---	---	---	---	---	---	---	---	---	---	<8.49	<4.18	<63.6	<4.9	<4.57	<9.33	<10.2	<8.66	<0.322	<10.7	<8.59	<12	<9.28	<8.16	<12.7			
Isopropylbenzene (cumene)	7,800 <sup>(2)</sup>	200,000 <sup>(2)</sup>	61,000 <sup>(2)</sup>	500 <sup>(2)</sup>	790 <sup>(2)</sup>	51 <sup>(2)</sup>	21	130	91 <sup>(2)</sup>	---	<4.25	<2.09	<31.8	0.59	<2.28	<4.66	<5.12	<4.33	0.438	<5.34	<4.3	<5.99	<4.64	<4.08	<6.36			
Methacrylonitrile	---	---	---	---	---	---	---	---	---	---	<42.5	<20.9	<318	<24.5	<22.8	<46.6	<51.2	<43.3	<1.61	<53.4	<43	<59.9	<46.4	<40.8	<63.6			
Methyl Methacrylate	---	---	---	---	---	---	---	---	---	---	<4.25	<2.09	<31.8	<2.45	<2.28	<4.66	<5.12	<4.33	<0.161	<5.34	<4.3	<5.99	<4.64	<4.08	<6.36			
Methyl tert-butyl ether	780	20,000	2,000	8,800	8,800	140	2,900	6,300	0.32	---	<1.7	<0.837	<12.7	<0.979	<0.914	<1.87	<2.05	<1.73	<0.0643	<2.14	<1.72	<2.4	<1.86	<1.63	<2.55			
Methylacrylate	2,300 <sup>(2)</sup>	61,000 <sup>(2)</sup>	6,100 <sup>(2)</sup>	6,500 <sup>(2)</sup>	6,500 <sup>(2)</sup>	6,500 <sup>(2)</sup>	---	---	0.89 <sup>(2)</sup>	---	<8.49	<4.18	<63.6	<4.9	<4.57	<9.33	<10.2	<8.66	<0.322	<10.7	<8.59	<12	<9.28	<8.16	<12.7			
Methylene chloride (dichloromethane)	85	760	12,000	13	24	34	1.4	10	0.02	1.4	<4.25	<2.09	<31.8	<2.45	<2.28	<4.66	<5.12	<4.33	<0.161	<5.34	<4.3	5.5	4.3	3.7	<6.36			
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	1.8	245	60.8	4610	215	398	136	615	64.8	120	110	18.3	18.2	32.9	<8.16	151			
n-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<4.25	<2.09	<31.8	<2.45	<2.28	<4.66	<5.12	<4.33	<0.161	<5.34	<4.3	<5.99	<4.64	<4.08	<6.36			
n-Hexane	---	---	---	290 <sup>(2)</sup>	290 <sup>(2)</sup>	15 <sup>(2)</sup>	---	---	---	---	<17	<8.37	<127	<9.79	<9.14	<18.7	<20.5	<17.3	2.95	<21.4	<17.2	<24	<18.6	<16.3	<25.5			
Nitrobenzene	39	1,000	1,000	92	140	9.4	140	380	0.1	---	<84.9	<41.8	<636	<49	<45.7	<93.3	<102	<86.6	<3.22	<107	<85.9	<120	<92.8	<81.6	<127			
n-Propylbenzene	---	---	---	---	---	---	---	---	---	---	<4.25	<2.09	12	0.73	1.0	<4.66	1.3	<4.33	1.21	<5.34	<4.3	<5.99	<4.64	<4.08	<6.36			
Pentachloroethane	---	---	---	---	---	---	---	---	---	---	<4.25	<2.09	<31.8	<2.45	<2.28	<4.66	<5.12	<4.33	<0.161	<5.34	<4.3	<5.99	<4.64	<4.08	<6.36			
p-Isopropyltoluene	---	---	---	---	---	---	---	---	---	---	<4.25	<2.09	<31.8	<2.45	<2.28	<4.66	<5.12	<4.33	<0.161	<5.34	<4.3	<5.99	<4.64	<4.08	<6.36			
Propionitrile	---	---	---	---	---	---	---	---	---	---	<42.5	<20.9	<318	<24.5	<22.8	<46.6	<51.2	<43.3	<1.61	<53.4	<43	<59.9	<46.4	<40.8	<63.6			
sec-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<4.25	<2.09	<31.8	<2.45	<2.28	<4.66	<5.12	<4.33	<0.161	<5.34	<4.3	<5.99	<4.64	<4.08	<6.36			
Styrene	16,000	410,000	41,000	1,500	1,500	430	230	230	4	230	<4.25	<2.09	<31.8	1.5	<2.28	<4.66	4.8	<4.33	<0.161	<5.34	1.9	<5.99	<4.64	<4.08	8.65			
tert-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<4.25	<2.09	<31.8	<2.45	<2.28	<4.66	<5.12	<4.33	<0.161	<5.34	<4.3	<5.99	<4.64	<4.08	<6.36			
Tetrachloroethene	12	110	2,400	11	20	28	0.24	1.7	0.06	---	<4.25	<2.09	<31.8	<2.45	<2.28	<4.66	<5.12	<4.33	<0.161	<5.34	<4.3	<5.99	<4.64	<4.08	<6.36			
Tetrahydrofuran	---	---	---	---	---	---	---	---	---	---	<42.5	<20.9	<318	<24.5	<22.8	<46.6	<51.2	<43.3	<1.61	<53.4	<43	<59.9	<46.4	<40.8	<63.6			
trans-1,2-Dichloroethene	1,600	41,000	41,000	3,100	3,100	3,100	---	---	0.7	---	<4.25	<2.09	<31.8	<2.45	<2.28	<4.66	<5.12	<4.33	<0.161	<5.34	<4.3	<5.99	<4.64	<4.08	<6.36			
trans-1,3-Dichloropropene	6.4	57	1,200	1.1	2.1	0.39	---	---	0.004	---	<3.4	<1.67	<25.5	<1.96	<1.83	<3.73	<4.1	<3.46	<0.129	<4.27	<3.44	<4.79	<3.71	<3.27	<5.09			
Trichloroethene	58	520	1,200	5	8.9	12	0.26	1.9	0.06	---	<4.25	<2.09	<31.8	<2.45	<2.28	<4.66	<5.12	<4.33	<0.161	<5.34	<4.3	<5.99	<4.64	<4.08	<6.36			
Trichlorofluoromethane	23,000 <sup>(2)</sup>	610,000 <sup>(2)</sup>	140,000 <sup>(2)</sup>	850 <sup>(2)</sup>	1,400 <sup>(2)</sup>	88 <sup>(2)</sup>	31	190	34 <sup>(2)</sup>	---	<4.25	<2.09	<31.8	<2.45	<2.28	<4.66	<5.12	<4.33	<0.161	<5.34	<4.3	<5.99	<4.64	<4.08	<6.36			
Vinyl acetate	78,000	1,000,000	200,000	1,000	1,600	10	270	1,600	170 <sup>(2)</sup>	---	<42.5	<20.9	<318	<24.5	<22.8	<46.6	<51.2	<43.3	<1.61	<53.4	<43	<59.9	<46.4	<40.8	<63.6			
Vinyl chloride	0.46	7.9	170	0.28	1.1	1.1	0.011	0.15	0.01	---	<1.7	<0.837	<12.7	<0.979	<0.914	<1.87	<2.05	<1.73	<0.0643	<2.14	<1.72	<2.4	<1.86	<1.63	<2.55			

Notes:

<sup>(1)</sup> Objectives are for Class I Groundwater.

<sup>(2)</sup> Non-TACO or provisional ROs provided by the IEPA.

--- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.

Concentration exceeds one or more project remediation objective.



TABLE 5-2  
Soil Confirmation Sample Analytical Results For Excavation Wall - VOCs  
Champaign Former MGP  
Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component to Groundwater <sup>(1)</sup>	Project Remediation Objectives	Sample Location:														
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial			P3-G-W	P3-G-W	P3-H-W	P3-H-W	P3-H.5-W	P4-A1-W	P4-A1-W	P4-A1-W	P4-A2-W	P4-A2-W	P4-A2-W	P4-A3-W	P4-A3-W	P4-A3-W	P4-A4-W
											Sample ID: P3-G-W (8)	Sample ID: P3-G-W (20)	Sample ID: P3-H-W (8)	Sample ID: P3-H-W (20)	Sample ID: P3-H.5-W (20)	Sample ID: P4-A1-W (3)	Sample ID: P4-A1-W (8)	Sample ID: P4-A1-W (20)	Sample ID: P4-A2-W (3)	Sample ID: P4-A2-W (8)	Sample ID: P4-A2-W (20)	Sample ID: P4-A3-W (3)	Sample ID: P4-A3-W (8)	Sample ID: P4-A3-W (20)	Sample ID: P4-A4-W (3)
										Sample Date: 2/4/2010	Sample Date: 2/4/2010	Sample Date: 2/5/2010	Sample Date: 2/5/2010	Sample Date: 2/5/2010	Sample Date: 3/31/2010	Sample Date: 3/31/2010	Sample Date: 3/31/2010	Sample Date: 3/29/2010	Sample Date: 3/29/2010	Sample Date: 3/31/2010	Sample Date: 3/29/2010	Sample Date: 3/29/2010	Sample Date: 3/31/2010	Sample Date: 3/26/2010	
										Sample Depth (feet): 8	Sample Depth (feet): 20	Sample Depth (feet): 8	Sample Depth (feet): 20	Sample Depth (feet): 20	Sample Depth (feet): 3	Sample Depth (feet): 8	Sample Depth (feet): 20	Sample Depth (feet): 3	Sample Depth (feet): 8	Sample Depth (feet): 20	Sample Depth (feet): 3	Sample Depth (feet): 8	Sample Depth (feet): 20	Sample Depth (feet): 3	
Hexachloroethane	78	2,000	2,000	---	---	---	160	160	0.5	---	<1.19	<4.09	<0.924	<0.205	<3.88	<6.5	<4.84	<42.1	<29	<23.3	<33.4	<32.1	<12.5	<6.59	<6.32
Iodomethane	---	---	---	---	---	---	---	---	---	---	<2.37	<8.17	<1.85	<0.41	<7.77	<13	<9.69	<84.2	<57.9	<46.7	<66.8	<64.2	<24.9	<13.2	<12.6
Isopropylbenzene (cumene)	7,800 <sup>(2)</sup>	200,000 <sup>(2)</sup>	61,000 <sup>(2)</sup>	500 <sup>(2)</sup>	790 <sup>(2)</sup>	51 <sup>(2)</sup>	21	130	91 <sup>(2)</sup>	---	<1.19	<4.09	<0.924	<0.205	<3.88	<6.5	<1.6	<12	<29	<23.3	<33.4	<32.1	<12.5	<6.59	<2.71
Methacrylonitrile	---	---	---	---	---	---	---	---	---	---	<11.9	<40.9	<9.24	<2.05	<38.8	<65	<48.4	<421	<290	<233	<334	<321	<125	<65.9	<63.2
Methyl Methacrylate	---	---	---	---	---	---	---	---	---	---	<1.19	<4.09	<0.924	<0.205	<3.88	<6.5	<4.84	<42.1	<29	<23.3	<33.4	<32.1	<12.5	<6.59	<6.32
Methyl tert-butyl ether	780	20,000	2,000	8,800	8,800	140	2,900	6,300	0.32	---	<0.475	<1.63	<0.37	<0.0819	<1.55	<2.6	<1.94	<16.8	<11.6	<9.34	<13.4	<12.8	<4.99	<2.64	<2.53
Methylacrylate	2,300 <sup>(2)</sup>	61,000 <sup>(2)</sup>	6,100 <sup>(2)</sup>	6,500 <sup>(2)</sup>	6,500 <sup>(2)</sup>	6,500 <sup>(2)</sup>	---	---	0.89 <sup>(2)</sup>	---	<2.37	<8.17	<1.85	<0.41	<7.77	<13	<9.69	<84.2	<57.9	<46.7	<66.8	<64.2	<24.9	<13.2	<12.6
Methylene chloride (dichloromethane)	85	760	12,000	13	24	34	1.4	10	0.02	1.4	<1.19	<4.09	<0.924	<0.205	<3.88	<6.5	<4.84	<42.1	16.6	13	<33.4	16.1	6.86	<6.59	1.61
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	1.8	38.4	53.6	4.42	5.6	86.8	162	200	17000	610	660	369	903	252	12	201
n-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<1.19	<4.09	<0.924	<0.205	<3.88	<6.5	5.06	<42.1	15.9	16.8	<33.4	25.6	<12.5	<6.59	10.9
n-Hexane	---	---	---	290 <sup>(2)</sup>	290 <sup>(2)</sup>	15 <sup>(2)</sup>	---	---	---	---	<4.75	<16.3	0.5	<0.819	<15.5	<26	<19.4	<168	<116	<93.4	<134	<128	<49.9	<26.4	<25.3
Nitrobenzene	39	1,000	1,000	92	140	9.4	140	380	0.1	---	<23.7	<81.7	<18.5	<4.1	<77.7	<130	<96.9	<842	<579	<467	<668	<642	<249	<132	<126
n-Propylbenzene	---	---	---	---	---	---	---	---	---	---	<1.19	<4.09	1.0	<0.205	<3.88	<6.5	<4.84	24	<29	<23.3	<33.4	<32.1	<12.5	<6.59	<6.32
Pentachloroethane	---	---	---	---	---	---	---	---	---	---	<1.19	<4.09	<0.924	<0.205	<3.88	<6.5	<4.84	<42.1	<29	<23.3	<33.4	<32.1	<12.5	<6.59	<6.32
p-Isopropyltoluene	---	---	---	---	---	---	---	---	---	---	<1.19	<4.09	<0.924	<0.205	<3.88	<6.5	<4.84	<42.1	<29	<23.3	<33.4	<32.1	<12.5	<6.59	1.81
Propionitrile	---	---	---	---	---	---	---	---	---	---	<11.9	<40.9	<9.24	<2.05	<38.8	<65	<48.4	<421	<290	<233	<334	<321	<125	<65.9	<63.2
sec-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<1.19	<4.09	<0.924	<0.205	<3.88	<6.5	<4.84	<42.1	<29	<23.3	<33.4	<32.1	<12.5	<6.59	<6.32
Styrene	16,000	410,000	41,000	1,500	1,500	430	230	230	4	230	<1.19	4.45	<0.924	0.771	<3.88	<6.5	<4.84	1150	<29	<23.3	<33.4	<32.1	<12.5	<6.59	<6.32
tert-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<1.19	<4.09	<0.924	<0.205	<3.88	<6.5	<4.84	<42.1	<29	<23.3	<33.4	<32.1	<12.5	<6.59	<6.32
Tetrachloroethene	12	110	2,400	11	20	28	0.24	1.7	0.06	---	<1.19	<4.09	<0.924	<0.205	<3.88	<6.5	<4.84	<42.1	<29	<23.3	<33.4	<32.1	<12.5	<6.59	<6.32
Tetrahydrofuran	---	---	---	---	---	---	---	---	---	---	<11.9	<40.9	<9.24	<2.05	<38.8	<65	<48.4	<421	<290	<233	<334	<321	<125	<65.9	<63.2
trans-1,2-Dichloroethene	1,600	41,000	41,000	3,100	3,100	3,100	---	---	0.7	---	<1.19	<4.09	<0.924	<0.205	<3.88	<6.5	<4.84	<42.1	<29	<23.3	<33.4	<32.1	<12.5	<6.59	<6.32
trans-1,3-Dichloropropene	6.4	57	1,200	1.1	2.1	0.39	---	---	0.004	---	<0.949	<3.27	<0.739	<0.164	<3.11	<5.2	<3.88	<42.1	<23.2	<18.7	<33.4	<25.7	<9.97	<6.59	<5.06
Trichloroethene	58	520	1,200	5	8.9	12	0.26	1.9	0.06	---	<1.19	<4.09	<0.924	<0.205	<3.88	<6.5	<4.84	<42.1	<29	<23.3	<33.4	<32.1	<12.5	<6.59	<6.32
Trichlorofluoromethane	23,000 <sup>(2)</sup>	610,000 <sup>(2)</sup>	140,000 <sup>(2)</sup>	850 <sup>(2)</sup>	1,400 <sup>(2)</sup>	88 <sup>(2)</sup>	31	190	34 <sup>(2)</sup>	---	<1.19	<4.09	<0.924	<0.205	<3.88	<6.5	<4.84	<42.1	<29	<23.3	<33.4	<32.1	<12.5	<6.59	<6.32
Vinyl acetate	78,000	1,000,000	200,000	1,000	1,600	10	270	1,600	170 <sup>(2)</sup>	---	<11.9	<40.9	<9.24	<2.05	<38.8	<65	<48.4	<421	<290	<233	<334	<321	<125	<65.9	<63.2
Vinyl chloride	0.46	7.9	170	0.28	1.1	1.1	0.011	0.15	0.01	---	<0.475	<1.63	<0.37	<0.0819	<1.55	<2.6	<1.94	<16.8	<11.6	<9.34	<13.4	<12.8	<4.99	<2.64	<2.53

Notes:

<sup>(1)</sup> Objectives are for Class I Groundwater.

<sup>(2)</sup> Non-TACO or provisional ROs provided by the IEPA.

--- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.

Concentration exceeds one or more project remediation objective.



TABLE 5-2  
Soil Confirmation Sample Analytical Results For Excavation Wall - VOCs  
Champaign Former MGP  
Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component to Groundwater <sup>(1)</sup>	Project Remediation Objectives	Sample Location:		P4-A4-W	P4-A4-W	P4-A5-W	P4-A5-W	P4-A5-W	P5-A3-W	P5-A3-W	P5-A3-W	P5-A4-W	P5-A4-W	P5-A4-W	P5-A5-W	P5-B5-W	P5-B5-W	P5-B5-W	
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial			Sample ID:	P4-A4-W (8)	P4-A4-W (20)	P4-A5-W (3)	P4-A5-W (8)	P4-A5-W (20)	P5-A3-W (3)	P5-A3-W (8)	P5-A3-W (20)	P5-A4-W(3)	P5-A4-W(8)	P5-A4-W(20)	P5-A4-W(8)	P5-A4-W(20)	P5-A5-W(20)	P5-B5-W (3)	P5-B5-W (8)	P5-B5-W (20)
	Sample Date:	3/26/2010	3/26/2010	3/26/2010	3/26/2010	3/31/2010	7/14/2010	7/14/2010			7/15/2010	7/14/2010	7/14/2010	7/15/2010	7/14/2010	7/14/2010	7/15/2010	7/13/2010	7/13/2010	7/13/2010	7/13/2010	7/13/2010	7/13/2010	7/13/2010	7/13/2010	7/13/2010	7/13/2010	7/13/2010
Sample Depth (feet):	8	20	3	8	20	3	8	20	3	8	20	3	8	20	3	8	20	3	8	20	3	8	20	3	8	20		
Hexachloroethane	78	2,000	2,000	---	---	---	160	160	0.5	---	<6.47	<7.22	<10.8	<6.52	<7.91	<6.31	<5.26	<0.663	<5.26	<4.73	<24.6	<0.531	<0.402	<0.173	<0.175			
Iodomethane	---	---	---	---	---	---	---	---	---	---	<12.9	<14.4	<21.5	<13	<15.8	<12.6	<10.5	<1.33	<10.5	<9.45	<49.2	<1.06	<0.804	<0.347	<0.349			
Isopropylbenzene (cumene)	7,800 <sup>(2)</sup>	200,000 <sup>(2)</sup>	61,000 <sup>(2)</sup>	500 <sup>(2)</sup>	790 <sup>(2)</sup>	51 <sup>(2)</sup>	21	130	91 <sup>(2)</sup>	---	1.33	<7.22	2.97	1.59	<7.91	6.41	<1.2	<0.663	<5.26	<4.73	<24.6	<0.531	0.29	0.13	0.078			
Methacrylonitrile	---	---	---	---	---	---	---	---	---	---	<64.7	<72.2	<108	<65.2	<79.1	<63.1	<52.6	<6.63	<52.6	<47.3	<246	<5.31	<4.02	<1.73	<1.75			
Methyl Methacrylate	---	---	---	---	---	---	---	---	---	---	<64.7	<72.2	<108	<65.2	<79.1	<63.1	<52.6	<0.663	<5.26	<4.73	<24.6	<0.531	<0.402	<0.173	<0.175			
Methyl tert-butyl ether	780	20,000	2,000	8,800	8,800	140	2,900	6,300	0.32	---	<2.59	<2.89	<4.3	<2.61	<3.16	<2.52	<2.1	<0.265	<2.11	<1.89	<9.83	<0.213	<0.161	<0.0693	<0.0699			
Methylacrylate	2,300 <sup>(2)</sup>	61,000 <sup>(2)</sup>	6,100 <sup>(2)</sup>	6,500 <sup>(2)</sup>	6,500 <sup>(2)</sup>	6,500 <sup>(2)</sup>	---	---	0.89 <sup>(2)</sup>	---	<12.9	<14.4	<21.5	<13	<15.8	<12.6	<10.5	<1.33	<10.5	<9.45	<49.2	<1.06	<0.804	<0.347	<0.349			
Methylene chloride (dichloromethane)	85	760	12,000	13	24	34	1.4	10	0.02	1.4	1.71	<7.22	2.65	1.98	<7.91	<6.31	<5.26	0.48	<5.26	<4.73	17	0.13	<0.402	<0.173	<0.175			
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	1.8	176	52.9	263	207	7.5	652	148	32.7	98.2	72.4	243	25.9	3.71	4.25	33.2			
n-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<6.47	<7.22	8.58	4.85	<7.91	<6.31	<5.26	0.26	<5.26	<4.73	<24.6	<0.531	<0.402	0.16	0.12			
n-Hexane	---	---	---	290 <sup>(2)</sup>	290 <sup>(2)</sup>	15 <sup>(2)</sup>	---	---	---	---	<25.9	<28.9	<43	<26.1	<31.6	<25.2	<21	<2.65	<21.1	<18.9	<98.3	<2.13	<1.61	0.23	<0.699			
Nitrobenzene	39	1,000	1,000	92	140	9.4	140	380	0.1	---	<129	<144	<215	<130	<158	<126	<105	<13.3	<105	<94.5	<492	<10.6	<8.04	<3.47	<3.49			
n-Propylbenzene	---	---	---	---	---	---	---	---	---	---	<6.47	<7.22	<10.8	<6.52	<7.91	2.6	<5.26	<0.663	<5.26	<4.73	<24.6	<0.531	0.09	0.16	0.11			
Pentachloroethane	---	---	---	---	---	---	---	---	---	---	<6.47	<7.22	<10.8	<6.52	<7.91	<6.31	<5.26	<0.663	<5.26	<4.73	<24.6	<0.531	<0.402	<0.173	<0.175			
p-Isopropyltoluene	---	---	---	---	---	---	---	---	---	---	<6.47	<7.22	<10.8	<6.52	<7.91	<6.31	<5.26	<0.663	<5.26	<4.73	<24.6	<0.531	<0.402	<0.173	<0.175			
Propionitrile	---	---	---	---	---	---	---	---	---	---	<64.7	<72.2	<108	<65.2	<79.1	<63.1	<52.6	<6.63	<52.6	<47.3	<246	<5.31	<4.02	<1.73	<1.75			
sec-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<64.7	<72.2	<108	<65.2	<79.1	<63.1	<52.6	<0.663	<5.26	<4.73	<24.6	<0.531	<0.402	<0.173	<0.175			
Styrene	16,000	410,000	41,000	1,500	1,500	430	230	230	4	230	<6.47	<7.22	<10.8	<6.52	<7.91	<6.31	<5.26	0.761	<5.26	<4.73	<24.6	1.93	<0.402	<0.173	0.249			
tert-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<6.47	<7.22	<10.8	<6.52	<7.91	<6.31	<5.26	<0.663	<5.26	<4.73	<24.6	<0.531	<0.402	<0.173	<0.175			
Tetrachloroethene	12	110	2,400	11	20	28	0.24	1.7	0.06	---	<6.47	<7.22	<10.8	<6.52	<7.91	<6.31	<5.26	<0.663	<5.26	<4.73	<24.6	<0.531	<0.402	<0.173	<0.175			
Tetrahydrofuran	---	---	---	---	---	---	---	---	---	---	<64.7	<72.2	<108	<65.2	<79.1	<63.1	<52.6	<6.63	<52.6	<47.3	<246	<5.31	<4.02	<1.73	<1.75			
trans-1,2-Dichloroethene	1,600	41,000	41,000	3,100	3,100	3,100	---	---	0.7	---	<6.47	<7.22	<10.8	<6.52	<7.91	<6.31	<5.26	<0.663	<5.26	<4.73	<24.6	<0.531	<0.402	<0.173	<0.175			
trans-1,3-Dichloropropene	6.4	57	1,200	1.1	2.1	0.39	---	---	0.004	---	<5.18	<7.22	<8.61	<5.22	<7.91	<5.05	2.8	<0.53	<4.21	<3.78	<19.7	<0.425	<0.322	<0.139	<0.14			
Trichloroethene	58	520	1,200	5	8.9	12	0.26	1.9	0.06	---	<6.47	<7.22	<10.8	<6.52	<7.91	<6.31	<5.26	<0.663	<5.26	<4.73	<24.6	<0.531	<0.402	<0.173	<0.175			
Trichlorofluoromethane	23,000 <sup>(2)</sup>	610,000 <sup>(2)</sup>	140,000 <sup>(2)</sup>	850 <sup>(2)</sup>	1,400 <sup>(2)</sup>	88 <sup>(2)</sup>	31	190	34 <sup>(2)</sup>	---	<6.47	<7.22	<10.8	<6.52	<7.91	<6.31	<5.26	<0.663	<5.26	<4.73	<24.6	<0.531	<0.402	<0.173	<0.175			
Vinyl acetate	78,000	1,000,000	200,000	1,000	1,600	10	270	1,600	170 <sup>(2)</sup>	---	<64.7	<72.2	<108	<65.2	<79.1	<63.1	<52.6	<6.63	<52.6	<47.3	<246	<5.31	<4.02	<1.73	<1.75			
Vinyl chloride	0.46	7.9	170	0.28	1.1	1.1	0.011	0.15	0.01	---	<2.59	<2.89	<4.3	<2.61	<3.16	<2.52	<2.1	<0.265	<2.11	<1.89	<9.83	<0.213	<0.161	<0.0693	<0.0699			

Notes:  
<sup>(1)</sup> Objectives are for Class I Groundwater.  
<sup>(2)</sup> Non-TACO or provisional ROs provided by the IEPA.  
 --- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.  
 Concentration exceeds one or more project remediation objective.



TABLE 5-2  
Soil Confirmation Sample Analytical Results For Excavation Wall - VOCs  
Champaign Former MGP  
Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component to Groundwater <sup>(1)</sup>	Project Remediation Objectives	Sample Location:		P5-C5-W	P5-C5-W	P6-A4.5-W	P6-A4.5-W	P6-A5.5-W	P6-A5.5-W	P6-B5.5-W	P6-C5.5-W	P6-CD5.5-W	P6-CD5.5-W	P6-CD5.5-W	P6-D5.5-W	P6-D5.5-W	P7-B1-SW	P7-BC1-SW		
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial			Sample ID:	P5-C5-W (8)	P5-C5-W (20)	P6-A4.5-W (3)	P6-A4.5-W (8)	P6-A5.5-W (8)	P6-A5.5-W (21)	P6-B5.5-W (20)	P6-C5.5-W (20)	P6-CD5.5-W (3)	P6-CD5.5-W (8)	P6-CD5.5-W (20)	P6-CD5.5-W (8)	P6-D5.5-W (8)	P6-D5.5-W (20)	P7-B1-SW (3)	P7-BC1-SW (3)		
	Sample Date:		7/13/2010		7/13/2010		10/12/2010				10/12/2010		10/12/2010		10/14/2010		10/14/2010		10/18/2010		10/19/2010		10/19/2010		10/19/2010		2/15/2011		2/15/2011
Sample Depth (feet):		8		20		3		8		8		21		20		20		3		8		20		8		20		3	
Hexachloroethane	78	2,000	2,000	---	---	---	160	160	0.5	---	<0.329	<4.56	<0.12	<0.616	<0.0513	<3.08	<3.88	<0.148	<4.78	<3.45	<0.427	<4.1	<4.9	<5.62	<0.113				
Iodomethane	---	---	---	---	---	---	---	---	---	---	<0.657	<9.11	<0.24	<1.23	<0.103	<6.15	<7.76	<0.295	<9.57	<6.91	<0.854	<8.2	<9.8	<11.2	<0.227				
Isopropylbenzene (cumene)	7,800 <sup>(2)</sup>	200,000 <sup>(2)</sup>	61,000 <sup>(2)</sup>	500 <sup>(2)</sup>	790 <sup>(2)</sup>	51 <sup>(2)</sup>	21	130	91 <sup>(2)</sup>	---	0.483	<4.56	0.11	0.4	0.0791	<3.08	<3.88	<0.148	<4.78	<3.45	<0.427	<4.1	<4.9	3.3	0.148				
Methacrylonitrile	---	---	---	---	---	---	---	---	---	---	<3.29	<45.6	<1.2	<6.16	<0.513	<30.8	<38.8	<1.48	<47.8	<34.5	<4.27	<41	<49	<56.2	<1.13				
Methyl Methacrylate	---	---	---	---	---	---	---	---	---	---	<0.329	<4.56	<0.12	<0.616	<0.0513	<3.08	<3.88	<0.148	<4.78	<3.45	<0.427	<4.1	<4.9	<5.62	<0.113				
Methyl tert-butyl ether	780	20,000	2,000	8,800	8,800	140	2,900	6,300	0.32	---	<0.131	<1.82	<0.048	<0.246	<0.0205	<1.23	<1.55	<0.059	<1.91	<1.38	<0.171	<1.64	<1.96	<2.25	<0.0454				
Methylacrylate	2,300 <sup>(2)</sup>	61,000 <sup>(2)</sup>	6,100 <sup>(2)</sup>	6,500 <sup>(2)</sup>	6,500 <sup>(2)</sup>	6,500 <sup>(2)</sup>	---	---	0.89 <sup>(2)</sup>	---	<0.657	<9.11	<0.24	<1.23	<0.103	<6.15	<7.76	<0.295	<9.57	<6.91	<0.854	<8.2	<9.8	<11.2	<0.227				
Methylene chloride (dichloromethane)	85	760	12,000	13	24	34	1.4	10	0.02	1.4	<0.329	<4.56	<0.12	<0.616	<0.0513	<3.08	<3.88	0.049	<4.78	0.84	0.13	<4.1	<4.9	<5.62	<0.113				
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	1.8	3.38	12.5	2.39	139	65.1	45.6	71.9	<0.295	49.5	51	13.7	29.6	78.6	200	0.342				
n-Butylbenzene	---	---	---	---	---	---	---	---	---	---	0.511	<4.56	<0.12	0.45	0.149	<3.08	<3.88	<0.148	<4.78	<3.45	<0.427	<4.1	<4.9	12.5	0.732				
n-Hexane	---	---	---	290 <sup>(2)</sup>	290 <sup>(2)</sup>	15 <sup>(2)</sup>	---	---	---	---	<1.31	<18.2	<0.48	<2.46	<0.205	<12.3	<15.5	<0.59	<19.1	<13.8	<1.71	<16.4	<19.6	<22.5	<0.454				
Nitrobenzene	39	1,000	1,000	92	140	9.4	140	380	0.1	---	<6.57	<91.1	<2.4	<12.3	<1.03	<61.5	<77.6	<2.95	<95.7	<69.1	<8.54	<82	<98	<112	<2.27				
n-Propylbenzene	---	---	---	---	---	---	---	---	---	---	0.516	<4.56	0.068	0.48	0.258	<3.08	<3.88	<0.148	<4.78	<3.45	<0.427	<4.1	<4.9	2.8	0.188				
Pentachloroethane	---	---	---	---	---	---	---	---	---	---	<0.329	<4.56	<0.12	<0.616	<0.0513	<3.08	<3.88	<0.148	<4.78	<3.45	<0.427	<4.1	<4.9	<5.62	<0.113				
p-Isopropyltoluene	---	---	---	---	---	---	---	---	---	---	<0.329	<4.56	<0.12	<0.616	<0.0513	<3.08	<3.88	<0.148	<4.78	<3.45	<0.427	<4.1	<4.9	<5.62	<0.113				
Propionitrile	---	---	---	---	---	---	---	---	---	---	<3.29	<45.6	<1.2	<6.16	<0.513	<30.8	<38.8	<1.48	<47.8	<34.5	<4.27	<41	<49	<56.2	<1.13				
sec-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<0.329	<4.56	<0.12	<0.616	<0.0513	<3.08	<3.88	<0.148	<4.78	<3.45	<0.427	<4.1	<4.9	<5.62	0.123				
Styrene	16,000	410,000	41,000	1,500	1,500	430	230	230	4	230	<0.329	12.4	<0.12	<0.616	<0.0513	5.92	5.19	<0.148	<4.78	<3.45	<0.427	<4.1	<4.9	<5.62	<0.113				
tert-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<0.329	<4.56	<0.12	<0.616	<0.0513	<3.08	<3.88	<0.148	<4.78	<3.45	<0.427	<4.1	<4.9	<5.62	<0.113				
Tetrachloroethene	12	110	2,400	11	20	28	0.24	1.7	0.06	---	<0.329	<4.56	<0.12	<0.616	<0.0513	<3.08	<3.88	<0.148	<4.78	<3.45	<0.427	<4.1	<4.9	<5.62	<0.113				
Tetrahydrofuran	---	---	---	---	---	---	---	---	---	---	<3.29	<45.6	<1.2	<6.16	<0.513	<30.8	<3.88	<1.48	<47.8	<34.5	<4.27	<41	<49	<56.2	<1.13				
trans-1,2-Dichloroethene	1,600	41,000	41,000	3,100	3,100	3,100	---	---	0.7	---	<0.329	<4.56	<0.12	<0.616	<0.0513	<3.08	<3.88	<0.148	<4.78	<3.45	<0.427	<4.1	<4.9	<5.62	<0.113				
trans-1,3-Dichloropropene	6.4	57	1,200	1.1	2.1	0.39	---	---	0.004	---	<0.263	<3.64	<0.096	<0.492	<0.041	<2.46	<3.1	<0.118	<3.83	<2.76	<0.342	<3.28	<3.92	<4.49	<0.0908				
Trichloroethene	58	520	1,200	5	8.9	12	0.26	1.9	0.06	---	<0.329	<4.56	<0.12	<0.616	<0.0513	<3.08	<3.88	<0.148	<4.78	<3.45	<0.427	<4.1	<4.9	<5.62	<0.113				
Trichlorofluoromethane	23,000 <sup>(2)</sup>	610,000 <sup>(2)</sup>	140,000 <sup>(2)</sup>	850 <sup>(2)</sup>	1,400 <sup>(2)</sup>	88 <sup>(2)</sup>	31	190	34 <sup>(2)</sup>	---	<0.329	<4.56	<0.12	<0.616	<0.0513	<3.08	<3.88	<0.148	<4.78	<3.45	<0.427	<4.1	<4.9	<5.62	<0.113				
Vinyl acetate	78,000	1,000,000	200,000	1,000	1,600	10	270	1,600	170 <sup>(2)</sup>	---	<3.29	<45.6	<1.2	<6.16	<0.513	<30.8	<38.8	<1.48	<47.8	<34.5	<4.27	<41	<49	<56.2	<1.13				
Vinyl chloride	0.46	7.9	170	0.28	1.1	1.1	0.011	0.15	0.01	---	<0.131	<1.82	<0.048	<0.246	<0.0205	<1.23	<1.55	<0.059	<1.91	<1.38	<0.171	<1.64	<1.96	<2.25	<0.0454				

Notes:  
<sup>(1)</sup> Objectives are for Class I Groundwater.  
<sup>(2)</sup> Non-TACO or provisional ROs provided by the IEPA.  
 --- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.  
 Concentration exceeds one or more project remediation objective.





TABLE 5-2  
Soil Confirmation Sample Analytical Results For Excavation Wall - VOCs  
Champaign Former MGP  
Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component to Groundwater <sup>(1)</sup>	Project Remediation Objectives	Sample Location:	P7-BC1-SW	P7-C1-SW	P7-C1-SW	P7-CD1-SW	P7-CD1-SW	P7-D1-W	P7-DE1-W	P7-DE1-W	P8-H1-W	P8-H4-W	P9-D1-W	P9-H1-W	P9-H2-W
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial			Sample ID:	P7-BC1-SW (8)	P7-C1-SW (3)	P7-C1-SW (21)	P7-CD1-SW (3)	P7-CD1-SW (8)	P7-D1-W (8)	P7-DE1-W (3)	P7-DE1-W (8)	P8-H1-W (3)	P8-H4-W (3)	P9-D1-W (8)	P9-H1-W (15)	P9-H2-W (8)
	Sample Date:	2/15/2011	2/15/2011	2/15/2011	2/17/2011	2/17/2011	3/2/2011	3/2/2011			3/2/2011	4/6/2011	4/6/2011	6/7/2011	5/25/2011	5/18/2011								
Sample Depth (feet):	8	3	21	3	8	8	3	8	3	8	3	8	3	8	3	8	3	8	3	8	15	8		
Hexachloroethane	78	2,000	2,000	---	---	---	160	160	0.5	---	<4.5	<4.43	<3.86	<3.87	<4.65	<3.79	<0.121	<0.377	<0.148	<0.13	<8.71	<0.0996	<0.22	
Iodomethane	---	---	---	---	---	---	---	---	---	---	<9	<8.86	<7.73	<7.74	<9.29	<7.58	<0.243	<0.755	<0.296	<0.261	<17.4	<0.199	<0.44	
Isopropylbenzene (cumene)	7,800 <sup>(2)</sup>	200,000 <sup>(2)</sup>	61,000 <sup>(2)</sup>	500 <sup>(2)</sup>	790 <sup>(2)</sup>	51 <sup>(2)</sup>	21	130	91 <sup>(2)</sup>	---	0.98	4.43	<3.86	2.5	<2.7	<6.2	0.189	0.35	1.03	0.489	15.9	<0.053	0.826	
Methacrylonitrile	---	---	---	---	---	---	---	---	---	---	<45	<44.3	<38.6	<38.7	<46.5	<37.9	<1.21	<3.77	<1.48	<1.3	<87.1	<0.996	<2.2	
Methyl Methacrylate	---	---	---	---	---	---	---	---	---	---	<4.5	<4.43	<3.86	<3.87	<4.65	<3.79	<0.121	<0.377	<0.148	<0.13	<8.71	<0.0996	<0.22	
Methyl tert-butyl ether	780	20,000	2,000	8,800	8,800	140	2,900	6,300	0.32	---	<1.8	<1.77	<1.55	<1.55	<1.86	<1.52	<0.0486	<0.151	<0.0593	<0.0522	<3.48	<0.0398	<0.088	
Methylacrylate	2,300 <sup>(2)</sup>	61,000 <sup>(2)</sup>	6,100 <sup>(2)</sup>	6,500 <sup>(2)</sup>	6,500 <sup>(2)</sup>	6,500 <sup>(2)</sup>	---	---	0.89 <sup>(2)</sup>	---	<9	<8.86	<7.73	<7.74	<9.29	<7.58	<0.243	<0.755	<0.296	<0.261	<17.4	<0.199	<0.44	
Methylene chloride (dichloromethane)	85	760	12,000	13	24	34	1.4	10	0.02	1.4	<4.5	<4.43	<3.86	<3.87	<4.65	<3.79	<0.121	0.083	<0.148	<0.13	<8.71	<0.0996	<0.22	
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	1.8	71.3	110	2.6	98.5	370	2150	0.685	113	13.1	3.01	668	3.33	0.778	
n-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<4.5	<4.43	<3.86	0.8	1	4.81	1.19	0.22	2.92	1.19	<8.71	<0.0996	3.11	
n-Hexane	---	---	---	290 <sup>(2)</sup>	290 <sup>(2)</sup>	15 <sup>(2)</sup>	---	---	---	---	<18	<17.7	<15.5	<15.5	<18.6	<15.2	<0.486	<1.51	<0.593	<0.522	<34.8	<0.398	0.088	
Nitrobenzene	39	1,000	1,000	92	140	9.4	140	380	0.1	---	<90	<88.6	<77.3	<77.4	<92.9	<75.8	<2.43	<7.55	<2.96	<2.61	<174	<1.99	<4.4	
n-Propylbenzene	---	---	---	---	---	---	---	---	---	---	<4.5	2.5	<3.86	1.4	1.5	5.61	0.254	0.33	0.796	0.367	12.6	0.037	0.992	
Pentachloroethane	---	---	---	---	---	---	---	---	---	---	<4.5	<4.43	<3.86	<3.87	<4.65	<3.79	<0.121	<0.377	<0.148	<0.13	<8.71	<0.0996	<0.22	
p-Isopropyltoluene	---	---	---	---	---	---	---	---	---	---	<4.5	<4.43	<3.86	2.5	<4.65	2.8	0.422	<0.377	<0.148	<0.13	<8.71	<0.0996	<0.22	
Propionitrile	---	---	---	---	---	---	---	---	---	---	<45	<44.3	<38.6	<38.7	<46.5	<37.9	<1.21	<3.77	<1.48	<1.3	<87.1	<0.996	<2.2	
sec-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<4.5	<4.43	<3.86	<3.87	<4.65	<3.79	0.335	<0.377	0.459	0.136	<8.71	<0.0996	0.496	
Styrene	16,000	410,000	41,000	1,500	1,500	430	230	230	4	230	<4.5	<4.43	<3.86	<3.87	<4.65	<3.79	<0.121	<0.377	<0.148	<0.13	<8.71	<0.0996	<0.22	
tert-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<4.5	<4.43	<3.86	<3.87	<4.65	<3.79	<0.121	<0.377	<0.148	<0.13	<8.71	<0.0996	<0.22	
Tetrachloroethene	12	110	2,400	11	20	28	0.24	1.7	0.06	---	<4.5	<4.43	<3.86	<3.87	<4.65	<3.79	<0.121	<0.377	<0.148	<0.13	<8.71	<0.0996	<0.22	
Tetrahydrofuran	---	---	---	---	---	---	---	---	---	---	<45	<44.3	<38.6	<38.7	<46.5	<37.9	<1.21	<3.77	<1.48	<1.3	<87.1	<0.996	<2.2	
trans-1,2-Dichloroethene	1,600	41,000	41,000	3,100	3,100	3,100	---	---	0.7	---	<4.5	<4.43	<3.86	<3.87	<4.65	<3.79	<0.121	<0.377	<0.148	<0.13	<8.71	<0.0996	<0.22	
trans-1,3-Dichloropropene	6.4	57	1,200	1.1	2.1	0.39	---	---	0.004	---	<3.6	<3.54	<3.09	<3.1	<3.72	<3.03	<0.0971	<0.302	<0.119	<0.104	<6.96	<0.0796	<0.176	
Trichloroethene	58	520	1,200	5	8.9	12	0.26	1.9	0.06	---	<4.5	<4.43	<3.86	<3.87	<4.65	<3.79	<0.121	<0.377	<0.148	<0.13	<8.71	<0.0996	<0.22	
Trichlorofluoromethane	23,000 <sup>(2)</sup>	610,000 <sup>(2)</sup>	140,000 <sup>(2)</sup>	850 <sup>(2)</sup>	1,400 <sup>(2)</sup>	88 <sup>(2)</sup>	31	190	34 <sup>(2)</sup>	---	<4.5	<4.43	<3.86	<3.87	<4.65	<3.79	<0.121	<0.377	<0.148	<0.13	<8.71	<0.0996	<0.22	
Vinyl acetate	78,000	1,000,000	200,000	1,000	1,600	10	270	1,600	170 <sup>(2)</sup>	---	<45	<44.3	<38.6	<38.7	<46.5	<37.9	<1.21	<3.77	<1.48	<1.3	<87.1	<0.996	<2.2	
Vinyl chloride	0.46	7.9	170	0.28	1.1	1.1	0.011	0.15	0.01	---	<1.8	<1.77	<1.55	<1.55	<1.86	<1.52	<0.0486	<0.151	<0.0593	<0.0522	<3.48	<0.0398	<0.088	

Notes:

<sup>(1)</sup> Objectives are for Class I Groundwater.

<sup>(2)</sup> Non-TACO or provisional ROs provided by the IEPA.

--- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.

Concentration exceeds one or more project remediation objective.





TABLE 5-4  
Soil Confirmation Sample Analytical Results For Excavation Wall - Inorganic  
Champaign Former MGP  
Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component to Groundwater <sup>(1)</sup>	IEPA Accepted Background Levels for non-MSA	Project Remediation Objective	Location:	P1-A4-W	P2-A2-W	P9-D1-W	P9-E1-W	P9-F1-W	P9-H4-W
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial				Sample ID:	P1-A4-W	P2-A2-W (3)	P9-D1-W (3)	P9-E1-W (8)	P9-F1-W (3)	P9-H4W (3)
												Sample Date:	7/7/2009	10/27/2009	6/7/2011	6/7/2011	5/25/2011	5/18/2011
												Depth (feet):	3'	3	3	8	3	3
<b>Metals (mg/kg)</b>																		
Mercury	23	610	61	10	16	0.10	0.45	0.45	6.4	0.06	0.1		0.048	0.044	0.045	0.012	0.052	0.062
Selenium	390	10,000	1,000	---	---	---	---	---	3.3	0.48	---		3.78	7.02	<0.588	<0.545	<0.566	<0.566
Arsenic	13.0	13.0	61.0	750	1,200	25,000	---	---	30	13	13		<1.3	2.4	14	8.06	14.1	15.3
Barium	5,500	140,000	14,000	690,000	910,000	870,000	---	---	1,800	110	---		92.5	94.5	208	89.1	180	159
Cadmium	78	2,000	200	1,800	2,800	59,000	---	---	59	0.6	---		0.83	0.66	0.33	<0.2	<0.2	0.2
Chromium	230	6,100	4,100	270	420	690	---	---	32	16.2	230		19.9	19.1	25.5	34.3	28	26
Lead	400	800	700	---	---	---	---	---	107	36	400		19.8	29.6	15.4	16.1	17	19.8
Silver	390	10,000	1,000	---	---	---	---	---	39	0.55	---		<0.52	<0.52	<0.55	<0.55	<0.54	<0.54
Cyanide (Amenable)	1,600	41,000	4,100	---	---	---	---	---	40	0.51	1,600		Interference	Interference	<0.731	1.05	13	9.8
Cyanide (Total)													4.14	9.3	2.41	2.16	29	37

Notes:

<sup>(1)</sup> Objectives are for Class I Groundwater.

--- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.

Concentration exceeds one or more project remediation objective.

Table 5-5  
Soil Confirmation Sample Analytical Results For Excavation Floor - BTEX and PNAs  
Champaign Former MGP  
Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component	IEPA Accepted Background Levels for MSA	Project Remediation Objectives	Sample Location: Sample ID: Sample Date: Sample Depth (feet):	P1-B2-F	P1-D3.5-F	P1-D5-F	P1-F3.5-F	P1-H1-F	P1-F2-F	P1-F5-F	P1-H3.5-F	P1-H5-F	P2-B2.5-F	P2-B4-F	P2-C4-F	P2-D2-F	P2-D4-F	P2-FG-1.5-F
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial					Groundwater	P1-B2-F(28)	P1-D3.5-F(25)	P1-D5-F(25)	P1-F3.5-F(20.5)	P1-H1-F(20)	P1-F2-F(21)	P1-F5-F(20)	P1-H3.5-F(20)	P1-H5-F(20.5)	P2-B2.5-F(22)	P2-B4-F(22)	P2-C4-F(22)	P2-D2-F(22)	P2-D4-F(22)
<b>BTEX Constituents (mg/kg)</b>																											
Benzene	12	100	2,300	0.8	1.6	2.2	0.069	0.51	0.03	---	0.069		30.2	5.39	20.9	3.02	18.6	16.1	41.0	2.58	14.4	5.62	76.4	14.5	35.8	133	8.37
Ethylbenzene	7,800	200,000	20,000	400	400	58	240	240	13	---	58		<0.846	4	2.7	1.3	11.1	1.1	5.11	3.23	6.95	6.64	3.91	0.96	<26.300	19	0.19
Toluene	16,000	410,000	410,000	650	650	42	130	130	12	---	42		<0.846	6.4	30.7	3.9	11.3	19	2.6	2.1	1.9	6.35	10.5	5.86	41.5	186	10.1
m,p-Xylenes	16,000	410,000	41,000	420 <sup>(1)</sup>	420 <sup>(1)</sup>	5.9 <sup>(2)</sup>	75 <sup>(2)</sup>	120 <sup>(2)</sup>	200 <sup>(2)</sup>	---	---		<0.846	6.77	3.6	4.1	---	3.69	11.9	5.74	4.9	6.64	6.78	3.82	25	105	0.956
o-Xylene	16,000	410,000	41,000	410	410	6.5	98	140	190	---	---		<0.846	3.4	1.9	2.4	---	1.9	9.27	2.9	5.73	3.32	3.04	1.8	11	45.4	0.55
Xylenes	16,000	410,000	41,000	320	320	5.6	63	100	150	---	5.6		<0.846	10.17	5.5	6.5	18.7	5.59	21.17	8.64	10.63	9.96	9.82	5.62	36	150.4	1.506
<b>PNA Constituents (mg/kg)</b>																											
Acenaphthene	4,700	120,000	120,000	---	---	---	---	---	570	0.13	4,700		1.42	1.83	0.302	6	0.324	1.22	0.008	0.023	2.83	0.924	0.061	1.1	3.49	5.78	0.006
Acenaphthylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	85 <sup>(4)</sup>	0.07	2,300		1.48	1.63	0.063	21.1	0.162	7.96	0.038	0.059	0.478	0.765	0.367	8.99	34.8	60.3	0.071
Anthracene	23,000	610,000	610,000	---	---	---	---	---	12,000	0.4	---		1.36	1.6	0.148	15.1	0.265	4.09	0.019	0.029	1.53	0.651	0.131	3.34	11.3	19.5	0.041
Benzo(a)anthracene	0.90	8	170	---	---	---	---	---	2	1.8	2		0.756	1.16	0.101	10.1	0.089	2.99	0.015	0.02	0.942	0.394	0.11	1.89	6.98	13.1	0.03
Benzo(a)pyrene	0.09	0.80	17	---	---	---	---	---	8	2.1	2.1		0.686	1.18	0.105	11.3	0.075	3.12	0.015	0.018	0.845	0.391	0.094	2.1	7.1	14.4	0.028
Benzo(b)fluoranthene	0.90	8	170	---	---	---	---	---	5	2.1	2.1		0.549	0.996	0.096	8.4	0.07	2.27	0.012	0.015	0.668	0.31	0.071	1.51	5.83	11.2	0.022
Benzo(g,h,i)perylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	27,000 <sup>(4)</sup>	1.7	---		0.238	0.599	0.056	4.77	0.035	1.42	0.009	0.009	0.377	0.137	0.037	0.82	2.67	5.84	0.012
Benzo(k)fluoranthene	9	78	1,700	---	---	---	---	---	49	1.7	9		0.194	0.382	0.032	2.79	0.021	0.757	0.004	0.005	0.227	0.096	0.026	0.522	1.99	3.8	0.007
Bis(2-ethylhexyl)phthalate	46	410	4,100	31,000	31,000	31,000	---	---	3,600	---	---		<0.371	<0.752	<0.075	<7.62	<0.077	<7.46	<0.073	<0.076	<1.87	<0.372	<0.375	<1.95	<7.8	<7.54	<0.074
Chrysene	88	780	17,000	---	---	---	---	---	160	2.7	88		0.848	1.29	0.108	11.3	0.094	3.04	0.017	0.021	0.949	0.455	0.091	2.18	7.82	14.1	0.031
Dibenzo(a,h)anthracene	0.09	0.80	17	---	---	---	---	---	2	0.42	0.42		0.073	0.14	0.014	1.1	0.009	<0.378	<0.004	<0.004	0.093	0.036	<0.019	0.189	0.667	1.32	<0.004
Fluoranthene	3,100	82,000	82,000	---	---	---	---	---	4,300	4.1	---		1.78	2.52	0.212	19.4	0.225	5.68	0.028	0.042	2.11	0.841	0.174	3.99	17	32.4	0.064
Fluorene	3,100	82,000	82,000	---	---	---	---	---	560	0.18	3,100		1.58	1.97	0.174	16.6	0.241	4.62	0.021	0.048	1.67	0.688	0.158	3.85	14.9	26.2	0.041
Indeno(1,2,3-cd)pyrene	0.90	8.00	170	---	---	---	---	---	14	1.6	1.6		0.226	0.476	0.044	3.56	0.031	1.03	0.006	0.007	0.295	0.11	0.028	0.617	2.23	4.54	0.009
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	0.2	1.8		4.53	12.4	0.66	136	8.82	36.5	0.548	0.608	20.2	5.31	1.46	30.2	134	223	0.106
Phenanthrene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	200 <sup>(4)</sup>	2.5	2,300		4.83	6.45	0.557	53.9	0.702	14.8	0.066	0.107	5.63	2.49	0.509	12.8	52	98.2	0.172
Pyrene	2,300	61,000	61,000	---	---	---	---	---	4,200	3	---		2.55	3.63	0.3	30.2	0.296	8.17	0.043	0.061	2.91	1.24	0.258	5.88	23.3	44.3	0.095

Notes:  
<sup>(1)</sup> Objective is for m-xylene  
<sup>(2)</sup> Objective is for p-xylene  
<sup>(3)</sup> Objectives are for Class I groundwater.  
<sup>(4)</sup> Non-TACO or provisional ROs provided by the IEPA.  
 --- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.  
 Concentration exceeds one or more project remediation objective.

Table 5-5  
Soil Confirmation Sample Analytical Results For Excavation Floor - BTEX and PNAs  
Champaign Former MGP  
Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component Groundwater	IEPA Accepted Background Levels for MSA	Project Remediation Objectives	Sample Location:															
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial				Sample ID:															
												P2-FG-3.5-F (24)	P2-E2.5-F (24)	P2-E4-F (24)	P3-B2-F (22)	P3-B2-F (24)	P3-C2-F (24)	P3-C3-F (22)	P3-C3-F (24)	P3-D2-F (22)	P3-D2-F (24)	P3-DE1.5-F (23)	P3-DE1-F (23)	P3-E3-F (24)	P3-E3-F (25)	P3-F2-F (23)	
												Sample Date:	11/19/2009	11/25/2009	11/25/2009	1/13/2010	1/13/2010	1/26/2010	1/25/2010	1/26/2010	1/25/2010	1/26/2010	1/29/2010	1/29/2010	1/28/2010	2/4/2010	2/3/2010
												Sample Depth (feet):	24	24	24	22	24	24	22	24	22	24	23	23	24	25	23
<b>BTEX Constituents (mg/kg)</b>																											
Benzene	12	100	2,300	0.8	1.6	2.2	0.069	0.51	0.03	--	0.069		21.9	21.8	10.7	2.97	0.0773	2.45	8.7	0.0765	17.8	26.4	6.32	29.2	11.7	27.6	32.3
Ethylbenzene	7,800	200,000	20,000	400	400	58	240	240	13	--	58		0.275	1.2	3.4	0.59	0.0015	0.16	<4.04	<0.161	2.6	1.85	<7.88	<7.5	5.39	0.036	2.2
Toluene	16,000	410,000	410,000	650	650	42	130	130	12	--	42		16	26.4	10.9	4.2	0.0969	2.26	<4.04	<0.161	26	3.98	<7.88	2.2	17.1	0.595	25.8
m,p-Xylenes	16,000	410,000	41,000	420 <sup>(1)</sup>	420 <sup>(1)</sup>	5.9 <sup>(2)</sup>	75 <sup>(2)</sup>	120 <sup>(2)</sup>	200 <sup>(2)</sup>	--	--		1.44	6.2	5.86	5.03	0.0037	1.08	<4.04	<0.161	21.7	3.79	<7.88	<7.5	11.7	0.111	11.6
o-Xylene	16,000	410,000	41,000	410	410	6.5	98	140	190	--	--		0.788	3.1	2.4	1.7	0.0019	0.446	<4.04	<0.161	8.34	1.77	<7.88	<7.5	5.84	0.076	5.33
Xylenes	16,000	410,000	41,000	320	320	5.6	63	100	150	--	5.6		2.228	9.3	8.26	6.73	0.0056	1.526	<4.04	<0.161	30.04	5.56	<7.88	<7.5	17.54	0.187	16.93
<b>PNA Constituents (mg/kg)</b>																											
Acenaphthene	4,700	120,000	120,000	--	--	--	--	--	570	0.13	4,700		0.005	0.034	0.328	0.024	<0.004	0.038	0.015	<0.004	1.62	<0.004	<0.007	0.03	2.59	<0.011	0.524
Acenaphthylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	--	--	--	--	--	85 <sup>(4)</sup>	0.07	2,300		0.025	0.285	1.87	0.239	<0.004	0.374	0.043	<0.004	8.47	<0.004	<0.007	0.032	10.6	0.028	3.39
Anthracene	23,000	610,000	610,000	--	--	--	--	--	12,000	0.4	--		0.017	0.129	0.823	0.016	<0.004	0.367	0.051	<0.004	6.82	<0.004	<0.007	0.032	5.06	0.015	1.7
Benzo(a)anthracene	0.90	8	170	--	--	--	--	--	2	1.8	2		0.014	0.114	0.52	0.005	0.004	0.248	0.035	0.004	4.49	<0.004	<0.007	0.021	2.67	0.015	0.995
Benzo(a)pyrene	0.09	0.80	17	--	--	--	--	--	8	2.1	2.1		0.011	0.105	0.513	<0.004	<0.004	0.17	0.028	<0.004	3.99	<0.004	<0.007	0.016	2.37	<0.011	0.902
Benzo(b)fluoranthene	0.90	8	170	--	--	--	--	--	5	2.1	2.1		0.009	0.075	0.38	<0.004	<0.004	0.195	0.032	<0.004	4.38	<0.004	<0.007	0.015	1.85	<0.011	0.75
Benzo(g,h,i)perylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	--	--	--	--	--	27,000 <sup>(4)</sup>	1.7	--		0.006	0.047	0.213	<0.004	<0.004	0.066	0.015	0.006	1.94	<0.004	<0.007	0.01	0.967	<0.011	0.403
Benzo(k)fluoranthene	9	78	1,700	--	--	--	--	--	49	1.7	9		<0.004	0.024	0.125	<0.004	<0.004	0.074	0.012	<0.004	1.63	<0.004	<0.007	<0.007	0.578	<0.011	0.233
Bis(2-ethylhexyl)phthalate	46	410	4,100	31,000	31,000	31,000	--	--	3,600	--	--		<0.074	<0.369	<0.745	<0.074	<0.074	<0.75	<0.074	<0.073	<3.76	<0.074	<0.144	<0.14	<1.48	<0.215	<2.24
Chrysene	88	780	17,000	--	--	--	--	--	160	2.7	88		0.011	0.096	0.565	0.004	<0.004	0.225	0.035	<0.004	4.3	<0.004	<0.007	0.02	2.58	0.01	0.937
Dibenzo(a,h)anthracene	0.09	0.80	17	--	--	--	--	--	2	0.42	0.42		<0.004	<0.019	0.053	<0.004	<0.004	<0.038	0.004	<0.004	0.536	<0.004	<0.007	<0.007	0.232	<0.011	<0.114
Fluoranthene	3,100	82,000	82,000	--	--	--	--	--	4,300	4.1	--		0.023	0.21	1.1	0.009	0.005	0.092	0.004	0.004	13.1	<0.004	<0.007	0.048	6.36	0.023	2.06
Fluorene	3,100	82,000	82,000	--	--	--	--	--	560	0.18	3,100		0.015	0.147	0.977	0.084	0.004	0.463	0.054	<0.004	7.11	<0.004	<0.007	0.037	8.68	0.019	2.14
Indeno(1,2,3-cd)pyrene	0.90	8.00	170	--	--	--	--	--	14	1.6	1.6		0.004	0.034	0.162	<0.004	<0.004	0.065	0.012	<0.004	1.76	<0.004	<0.007	<0.007	0.742	<0.011	0.308
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	0.2	1.8		0.103	2.32	5.9	2.99	0.019	1.65	0.168	0.025	56	0.396	0.041	0.363	52.4	0.147	26
Phenanthrene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	--	--	--	--	--	200 <sup>(4)</sup>	2.5	2,300		0.062	0.547	3.27	0.056	0.009	1.12	0.175	0.009	20.8	0.003	0.008	0.13	20.2	0.062	5.96
Pyrene	2,300	61,000	61,000	--	--	--	--	--	4,200	3	--		0.034	0.307	1.61	0.006	0.004	0.47	0.075	0.005	10.3	<0.004	<0.007	0.054	9.07	0.029	2.74

Notes:  
<sup>(1)</sup> Objective is for m-xylene  
<sup>(2)</sup> Objective is for p-xylene  
<sup>(3)</sup> Objectives are for Class I groundwater.  
<sup>(4)</sup> Non-TACO or provisional ROs provided by the IEPA.  
 --- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.  
 Concentration exceeds one or more project remediation objective.

Table 5-5  
Soil Confirmation Sample Analytical Results For Excavation Floor - BTEX and PNAs  
Champaign Former MGP  
Ameren Illinois

Constituent	IEPA Accepted									Sample Location: Sample ID: Sample Date: Sample Depth (feet):	Sample Locations																	
	Soil Ingestion			Soil Inhalation			Indoor Air				Soil Component	Background Levels for MSA	Project Remediation Objectives	P3-F2-F	P3-H1.5-F	P4-B2-F	P4-B3-F	P4-B2-F	P4-B3-F	P4-D4.5-F	P4-EF1.5-F	P4-EF3-F	P4-G2-F	P4-G4-F	P4-G4-F	P5-B2-F	P6-B4.5-F	P7-CD1-F
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	Construction					Groundwater	2/3/2010	2/3/2010	4/2/2010	4/2/2010	4/7/2010	4/7/2010	4/12/2010	4/12/2010	4/12/2010	5/20/2010	5/20/2010	5/20/2010	7/16/2010	10/15/2010
<b>BTEX Constituents (mg/kg)</b>																												
Benzene	12	100	2,300	0.8	1.6	2.2	0.069	0.51	0.03	---	0.069	23	3.05	114	42.7	91.5	0.728	26.2	0.372	0.2	0.142	7.7	1.39	19.9	0.38			<0.0202
Ethylbenzene	7,800	200,000	20,000	400	400	58	240	240	13	---	58	<0.531	<0.106	<3.63	<2.22	<40.9	0.44	<3.71	0.031	0.18	<0.237	1.62	0.064	<2.080	0.514			0.136
Toluene	16,000	410,000	410,000	650	650	42	130	130	12	---	42	3.68	0.024	<3.63	<2.22	<40.9	2.67	1.1	0.139	0.098	0.057	9.16	0.11	5.06	2.12			0.033
m,p-Xylenes	16,000	410,000	41,000	420 <sup>(1)</sup>	420 <sup>(1)</sup>	5.9 <sup>(2)</sup>	75 <sup>(2)</sup>	120 <sup>(2)</sup>	200 <sup>(2)</sup>	---	---	<0.531	<0.106	<3.63	<2.22	---	---	<3.71	0.07	0.19	0.12	3.05	0.066	<2.080	2.45			0.062
o-Xylene	16,000	410,000	41,000	410	410	6.5	98	140	190	---	---	<0.531	<0.106	<3.63	<2.22	---	---	<3.71	0.03	0.1	0.066	1.77	0.038	<2.080	1.03			0.053
Xylenes	16,000	410,000	41,000	320	320	5.6	63	100	150	---	5.6	<0.531	<0.106	<3.63	<2.22	<40.9	3.53	<3.71	0.10	0.29	0.186	4.82	0.104	<2.080	3.48			0.115
<b>PNA Constituents (mg/kg)</b>																												
Acenaphthene	4,700	120,000	120,000	---	---	---	---	---	570	0.13	4,700	<0.011	<0.011	0.011	0.012	<0.004	0.921	0.007	0.12	0.016	0.053	<0.004	0.017	0.22	0.042			1.36
Acenaphthylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	85 <sup>(4)</sup>	0.07	2,300	<0.011	<0.011	0.01	0.025	<0.004	4.49	0.005	0.505	0.004	0.256	<0.004	0.021	0.487	0.034			0.316
Anthracene	23,000	610,000	610,000	---	---	---	---	---	12,000	0.4	---	<0.011	<0.011	0.011	0.013	<0.004	2.62	0.003	0.369	0.008	0.212	<0.004	0.021	0.433	0.048			0.82
Benzo(a)anthracene	0.90	8	170	---	---	---	---	---	2	1.8	2	<0.011	<0.011	0.009	0.01	<0.004	1.51	0.004	0.227	0.006	0.134	0.004	0.02	0.318	0.031			0.481
Benzo(a)pyrene	0.09	0.80	17	---	---	---	---	---	8	2.1	2.1	<0.011	<0.011	0.007	0.008	<0.004	1.56	<0.004	0.207	0.005	0.124	<0.004	0.02	0.261	0.026			0.517
Benzo(b)fluoranthene	0.90	8	170	---	---	---	---	---	5	2.1	2.1	<0.011	<0.011	0.006	0.007	<0.004	1.15	<0.004	0.164	0.004	0.099	<0.004	0.021	0.207	0.021			0.428
Benzo(g,h,i)perylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	27,000 <sup>(4)</sup>	1.7	---	<0.011	<0.011	0.005	0.005	<0.004	0.659	<0.004	0.088	0.004	0.061	<0.004	0.016	0.147	0.016			0.265
Benzo(k)fluoranthene	9	78	1,700	---	---	---	---	---	49	1.7	9	<0.011	<0.011	<0.004	<0.004	<0.004	0.364	<0.004	0.062	<0.004	0.034	<0.004	0.006	<0.097	<0.007			0.133
Bis(2-ethylhexyl)phthalate	46	410	4,100	31,000	31,000	---	---	---	3,600	---	---	<0.219	<0.221	<0.074	<0.075	<0.074	<1.86	<0.073	<0.725	<0.075	<0.075	<0.074	<0.074	<1.91	<0.145			<0.371
Chrysene	88	780	17,000	---	---	---	---	---	160	2.7	88	<0.011	<0.011	0.007	0.008	<0.004	1.52	<0.004	0.215	0.006	0.129	<0.004	0.017	0.234	0.026			0.508
Dibenzo(a,h)anthracene	0.09	0.80	17	---	---	---	---	---	2	0.42	0.42	<0.011	<0.011	<0.004	<0.004	<0.004	0.151	<0.004	<0.037	<0.004	0.015	<0.004	0.003	<0.097	<0.007			0.057
Fluoranthene	3,100	82,000	82,000	---	---	---	---	---	4,300	4.1	---	<0.011	<0.011	0.016	0.018	<0.004	3.28	0.004	0.489	0.01	0.271	0.005	0.036	0.536	0.063			1.01
Fluorene	3,100	82,000	82,000	---	---	---	---	---	560	0.18	3,100	<0.011	<0.011	0.012	0.018	<0.004	2.77	0.006	0.4	0.011	0.204	<0.004	0.02	0.521	0.047			0.84
Indeno(1,2,3-cd)pyrene	0.90	8.00	170	---	---	---	---	---	14	1.6	1.6	<0.011	<0.011	<0.004	<0.004	<0.004	0.482	<0.004	0.067	<0.004	0.046	<0.004	0.011	0.105	0.009			0.196
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	0.2	1.8	0.019	0.029	0.312	0.417	0.045	20.7	0.1	1.23	0.114	1.17	0.135	0.297	2.94	0.21			3.19
Phenanthrene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	200 <sup>(4)</sup>	2.5	2,300	<0.011	<0.011	0.042	0.05	0.007	8.92	0.015	1.27	0.033	0.722	0.011	0.081	1.51	0.174			2.82
Pyrene	2,300	61,000	61,000	---	---	---	---	---	4,200	3	---	<0.011	<0.011	0.021	0.025	<0.004	5.08	0.006	0.69	0.015	0.395	0.007	0.052	0.829	0.089			1.65

Notes:  
<sup>(1)</sup> Objective is for m-xylene  
<sup>(2)</sup> Objective is for p-xylene  
<sup>(3)</sup> Objectives are for Class I groundwater.  
<sup>(4)</sup> Non-TACO or provisional ROs provided by the IEPA.  
 --- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.  
 Concentration exceeds one or more project remediation objective.



Table 5-5  
Soil Confirmation Sample Analytical Results For Excavation Floor - BTEX and PNAs  
Champaign Former MGP  
Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component Groundwater	IEPA Accepted Background Levels for MSA	Project Remediation Objectives	Sample Location: Sample ID: Sample Date: Sample Depth (feet):	P8-E1.2-F	P8-E1.2-F
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial					P8-E1.2-F (20)	P8-E1.2-F (22)
<b><i>BTEX Constituents (mg/kg)</i></b>														
Benzene	12	100	2,300	0.8	1.6	2.2	0.069	0.51	0.03	---	0.069		1.34	0.0014
Ethylbenzene	7,800	200,000	20,000	400	400	58	240	240	13	---	58		0.181	<0.0039
Toluene	16,000	410,000	410,000	650	650	42	130	130	12	---	42		0.421	0.001J
m,p-Xylenes	16,000	410,000	41,000	420 <sup>(1)</sup>	420 <sup>(1)</sup>	5.9 <sup>(2)</sup>	75 <sup>(2)</sup>	120 <sup>(2)</sup>	200 <sup>(2)</sup>	---	---		0.12	0.008J
o-Xylene	16,000	410,000	41,000	410	410	6.5	98	140	190	---	---		0.324	<0.0039
Xylenes	16,000	410,000	41,000	320	320	5.6	63	100	150	---	5.6		0.444	0.008J
<b><i>PNA Constituents (mg/kg)</i></b>														
Acenaphthene	4,700	120,000	120,000	---	---	---	---	---	570	0.13	4,700		0.038	0.009
Acenaphthylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	85 <sup>(4)</sup>	0.07	2,300		0.131	0.009
Anthracene	23,000	610,000	610,000	---	---	---	---	---	12,000	0.4	---		0.017	0.007
Benzo(a)anthracene	0.90	8	170	---	---	---	---	---	2	1.8	2		0.015	0.01
Benzo(a)pyrene	0.09	0.80	17	---	---	---	---	---	8	2.1	2.1		0.011	0.006
Benzo(b)fluoranthene	0.90	8	170	---	---	---	---	---	5	2.1	2.1		0.009	0.007
Benzo(g,h,i)perylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	27,000 <sup>(4)</sup>	1.7	---		0.007	0.006
Benzo(k)fluoranthene	9	78	1,700	---	---	---	---	---	49	1.7	9		<0.004	<0.004
Bis(2-ethylhexyl)phthalate	46	410	4,100	31,000	31,000	31,000	---	---	3,600	---	---		<0.076	<0.075
Chrysene	88	780	17,000	---	---	---	---	---	160	2.7	88		0.012	0.007
Dibenzo(a,h)anthracene	0.09	0.80	17	---	---	---	---	---	2	0.42	0.42		<0.004	<0.004
Fluoranthene	3,100	82,000	82,000	---	---	---	---	---	4,300	4.1	---		0.024	0.014
Fluorene	3,100	82,000	82,000	---	---	---	---	---	560	0.18	3,100		0.038	0.008
Indeno(1,2,3-cd)pyrene	0.90	8.00	170	---	---	---	---	---	14	1.6	1.6		0.004	0.003J
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	0.2	1.8		2.3	0.033
Phenanthrene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	200 <sup>(4)</sup>	2.5	2,300		0.07	0.022
Pyrene	2,300	61,000	61,000	---	---	---	---	---	4,200	3	---		0.038	0.021

Notes:

<sup>(1)</sup> Objective is for m-xylene

<sup>(2)</sup> Objective is for p-xylene

<sup>(3)</sup> Objectives are for Class I groundwater.

<sup>(4)</sup> Non-TACO or provisional ROs provided by the IEPA.

--- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.

Concentration exceeds one or more project remediation objective.



Table 5-6  
Soil Confirmation Sample Analytical Results For Excavation Floor - VOCs  
Champaign Former MGP  
Ameren Illinois

Constituent	Soil									Project Remediation Objectives	Sample Location:											
	Soil Ingestion			Soil Inhalation			Indoor Air		Component to Groundwater <sup>(1)</sup>		Sample ID:	P1-B2-F	P1-B3.5	P1-B5-F	P1-C5-F	P1-D3.5-F	P1-D5-F	P1-F3.5-F	P1-F2-F	P1-F5-F	P1-H3.5-F	P1-H5-F
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial			Sample Date:	P1-B2-F(28)	P1-B3.5(26)	P1-B5-F(25)	P1-C5-F (22)	P1-D3.5-F(25)	P1-D5-F(25)	P1-F3.5-F(20.5)	P1-F2-F (21)	P1-F5-F (20)	P1-H3.5-F (20)	P1-H5-F (20.5)
									Sample Depth (feet):	28'	26'	25'	22'	25'	25'	20.5'	21	20	20	20.5		
Chloromethane (methyl chloride)	--	--	--	--	--	--	--	--	--	--	<1.69	<0.29	<0.23	<7.7	<8.4	<10.2	<12.6	<6.46	<7.02	<6.06	<10.0	
cis-1,2-Dichloroethene	780	20,000	20,000	1,200	1,200	1,200	700	700	0.4	--	<0.846	<0.145	<0.115	<3.8	<4.2	<5.09	<6.29	<3.23	<3.51	<3.03	<5.0	
cis-1,3-Dichloropropene	6.4	57	1,200	1.1	2.1	0.39	0.061	0.45	0.004	--	<0.677	<0.116	<0.0918	<3.1	<3.36	<4.07	<5.03	<2.58	<2.81	<2.42	<4.0	
Cyclohexanone	390,000 <sup>(2)</sup>	1,000,000 <sup>(2)</sup>	1,000,000 <sup>(2)</sup>	660 <sup>(2)</sup>	660 <sup>(2)</sup>	660 <sup>(2)</sup>	--	--	150 <sup>(2)</sup>	--	<16.9	<2.9	<2.3	<76.5	<84	<102	<126	<64.6	<70.2	<60.6	<100	
Dibromochloromethane (chlorodibromomethane)	1,600	41,000	41,000	1,300	1,300	1,300	630	630	0.4	--	<0.846	<0.145	<0.115	<3.8	<4.2	<5.09	<6.29	<3.23	<3.51	<3.03	<5.0	
Dibromomethane (methylene bromide)	780 <sup>(2)</sup>	20,000 <sup>(2)</sup>	20,000 <sup>(2)</sup>	2,700 <sup>(2)</sup>	2,700 <sup>(2)</sup>	2,700 <sup>(2)</sup>	--	--	0.34 <sup>(2)</sup>	--	<0.846	<0.145	<0.115	<3.8	<4.2	<5.09	<6.29	<3.23	<3.51	<3.03	<5.0	
Dichlorodifluoromethane	16,000 <sup>(2)</sup>	410,000 <sup>(2)</sup>	180,000 <sup>(2)</sup>	190 <sup>(2)</sup>	310 <sup>(2)</sup>	20 <sup>(2)</sup>	6.8	4.2	43 <sup>(2)</sup>	--	<1.69	<0.29	<0.23	<7.7	<8.4	<10.2	<12.6	<6.46	<7.02	<6.06	<10.0	
Ethyl acetate	70,000 <sup>(2)</sup>	1,000,000 <sup>(2)</sup>	1,000,000 <sup>(2)</sup>	10,000 <sup>(2)</sup>	10,000 <sup>(2)</sup>	10,000 <sup>(2)</sup>	--	--	26 <sup>(2)</sup>	--	<8.46	<0.145	<1.15	<38.3	<42	<50.9	<62.9	<32.3	<35.1	<30.3	<50.0	
Ethyl ether	16,000 <sup>(2)</sup>	410,000 <sup>(2)</sup>	410,000 <sup>(2)</sup>	8,800 <sup>(2)</sup>	8,800 <sup>(2)</sup>	8,800 <sup>(2)</sup>	--	--	6.1 <sup>(2)</sup>	--	<0.846	<0.145	<0.115	<3.8	<4.2	<5.09	<6.29	<3.23	<3.51	<3.03	<5.0	
Ethyl methacrylate	--	--	--	--	--	--	--	--	--	--	<0.846	<0.145	<0.115	<3.8	<4.2	<5.09	<6.29	<3.23	<3.51	<3.03	<5.0	
Heptane	--	--	--	--	--	--	--	--	--	--	<3.39	<0.579	<0.459	2.7	<16.8	<20.4	<25.2	<12.9	<14.0	<12.1	<20.0	
Hexachlorobutadiene	--	--	--	--	--	--	--	--	--	--	<0.846	<0.145	<0.115	<3.8	<4.2	<5.09	<6.29	<3.23	<3.51	<3.03	<5.0	
Hexachloroethane	78	2,000	2,000	--	--	--	160	160	0.5	--	<0.846	<0.145	<0.115	<3.8	<4.2	<5.09	<6.29	<3.23	<3.51	<3.03	<5.0	
Iodomethane	--	--	--	--	--	--	--	--	--	--	<1.69	<0.29	<0.23	<7.7	<8.4	<10.2	<12.6	<6.46	<7.02	<6.06	<10.0	
Isopropylbenzene (cumene)	7,800 <sup>(2)</sup>	200,000 <sup>(2)</sup>	61,000 <sup>(2)</sup>	500 <sup>(2)</sup>	790 <sup>(2)</sup>	51 <sup>(2)</sup>	21	130	91 <sup>(2)</sup>	--	<0.846	<0.145	<0.115	<3.8	<4.2	<5.09	<6.29	<3.23	<3.51	<3.03	<5.0	
Methacrylonitrile	--	--	--	--	--	--	--	--	--	--	<8.46	<1.45	<1.15	<38.3	<42	<50.9	<62.9	<32.3	<35.1	<30.3	<50.0	
Methyl Methacrylate	--	--	--	--	--	--	--	--	--	--	<0.846	<0.145	<0.115	<3.8	<4.2	<5.09	<6.29	<3.23	<3.51	<3.03	<5.0	
Methyl tert-butyl ether	780	20,000	2,000	8,800	8,800	140	2,900	6,300	0.32	--	<0.339	<0.0579	<0.0459	<1.5	<1.68	<2.04	<2.52	<1.29	<1.4	<1.21	<2.0	
Methylacrylate	2,300 <sup>(2)</sup>	61,000 <sup>(2)</sup>	6,100 <sup>(2)</sup>	6,500 <sup>(2)</sup>	6,500 <sup>(2)</sup>	6,500 <sup>(2)</sup>	--	--	0.89 <sup>(2)</sup>	--	<1.69	<0.29	<0.23	<7.7	<8.4	<10.2	<12.6	<6.46	<7.02	<6.06	<10.0	
Methylene chloride (dichloromethane)	85	760	12,000	13	24	34	1.4	10	0.02	1.4	0.19	0.043	0.036	0.9	<4.2	<5.09	1.3	<3.23	<3.51	<3.03	<5.0	
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	1.8	1.69	0.326	<0.23	186	<128	26.5	28.6	30.90	204	54.30	20.60	
n-Butylbenzene	--	--	--	--	--	--	--	--	--	--	<0.846	<0.145	<0.115	<3.8	<4.2	<5.09	<6.29	<3.23	<3.51	<3.03	<5.0	
n-Hexane	--	--	--	290 <sup>(2)</sup>	290 <sup>(2)</sup>	15 <sup>(2)</sup>	--	--	--	--	<3.39	<0.579	<0.459	4.8	<16.8	<20.4	<25.2	<12.9	<14.0	<12.1	<20.0	
Nitrobenzene	39	1,000	1,000	92	140	9.4	140	380	0.1	--	<16.9	<2.9	<2.3	<76.5	<84	<102	<126	<64.6	<70.2	<60.6	<100	
n-Propylbenzene	--	--	--	--	--	--	--	--	--	--	<0.846	<0.145	<0.115	<3.8	<4.2	<5.09	<6.29	<3.23	0.74	<3.03	<5.0	
Pentachloroethane	--	--	--	--	--	--	--	--	--	--	<0.846	<0.145	<0.115	<3.8	<4.2	<5.09	<6.29	<3.23	<3.51	<3.03	<5.0	
p-Isopropyltoluene	--	--	--	--	--	--	--	--	--	--	<0.846	<0.145	<0.115	<3.8	<4.2	<5.09	<6.29	<3.23	<3.51	<3.03	<5.0	
Propionitrile	--	--	--	--	--	--	--	--	--	--	<8.46	<1.45	<0.115	<3.8	<4.2	<50.9	<62.9	<32.3	<35.1	<30.3	<50.0	
sec-Butylbenzene	--	--	--	--	--	--	--	--	--	--	<0.846	<0.145	<0.115	<38.3	<4.2	<5.09	<6.29	<3.23	<3.51	<3.03	<5.0	
Styrene	16,000	410,000	41,000	1,500	1,500	430	230	230	4	230	<0.846	<0.145	<0.115	1.9	3.6	<5.09	<6.29	<3.23	4.63	<3.03	<5.0	
tert-Butylbenzene	--	--	--	--	--	--	--	--	--	--	<0.846	<0.145	<0.115	<3.8	<4.2	<5.09	<6.29	<3.23	<3.51	<3.03	<5.0	
Tetrachloroethene	12	110	2,400	11	20	28	0.24	1.7	0.06	--	<0.846	<0.145	<0.115	<3.8	<4.2	<5.09	<6.29	<3.23	<3.51	<3.03	<5.0	
Tetrahydrofuran	--	--	--	--	--	--	--	--	--	--	<8.46	<1.45	<1.15	<38.3	<4.2	<50.9	<62.9	<32.3	<35.1	<30.3	<50.0	
trans-1,2-Dichloroethene	1,600	41,000	41,000	3,100	3,100	3,100	10	63	0.7	--	<0.846	<0.145	<0.115	<3.8	<4.2	<5.09	<6.29	<3.23	<3.51	<3.03	<5.0	
trans-1,3-Dichloropropene	6.4	57	1,200	1.1	2.1	0.39	--	--	0.004	--	<0.677	<0.116	<0.0918	<3.1	<3.36	<4.07	<5.03	<2.58	<2.81	<2.42	<4.0	
Trichloroethene	58	520	1,200	5	8.9	12	0.26	1.9	0.06	--	<0.846	<0.145	<0.115	<3.8	<4.2	<5.09	<6.29	<3.23	<3.51	<3.03	<5.0	
Trichlorofluoromethane	23,000 <sup>(2)</sup>	610,000 <sup>(2)</sup>	140,000 <sup>(2)</sup>	850 <sup>(2)</sup>	1,400 <sup>(2)</sup>	88 <sup>(2)</sup>	31	190	34 <sup>(2)</sup>	--	<0.846	<0.145	<0.115	<3.8	<4.2	<5.09	<6.29	<3.23	<3.51	<3.03	<5.0	
Vinyl acetate	78,000	1,000,000	200,000	1,000	1,600	10	270	1,600	170 <sup>(2)</sup>	--	<8.46	<1.45	<1.15	<38.3	<4.2	<50.9	<62.9	<32.3	<35.1	<30.3	<50.0	
Vinyl chloride	0.46	7.9	170	0.28	1.1	1.1	0.011	0.15	0.01	--	<0.339	<0.0579	<0.0459	<1.5	<1.68	<2.04	<2.52	<1.29	<1.400	<1.21	<2.0	

Notes:

<sup>(1)</sup> Objectives are for Class I Groundwater.

<sup>(2)</sup> Non-TACO or provisional ROs provided by the IEPA.

-- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.  
Concentration exceeds one or more project remediation objective.

Concentration exceeds one or more project remediation objectives.



Table 5-6  
Soil Confirmation Sample Analytical Results For Excavation Floor - VOCs  
Champaign Former MGP  
Ameren Illinois

Constituent	Soil									Project Remediation Objectives	Sample Location:												
	Soil Ingestion			Soil Inhalation			Indoor Air		Component		Sample ID:	P2-B2.5-F	P2-B4-F	P2-C4-F	P2-D2-F	P2-D4-F	P2-FG-3.5-F	P2-E2.5-F	P2-E4-F	P3-C2-F	P3-D2-F	P3-D2-F	P3-DE1.5-F
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	to Groundwater <sup>(1)</sup>			P2-B2.5-F (22)	P2-B4-F (22)	P2-C4-F (22)	P2-D2-F (22)	P2-D4-F (22)	P2-FG-3.5-F (24)	P2-E2.5-F (24)	P2-E4-F (24)	P3-C2-F (24)	P3-D2-F (22)	P3-D2-F (24)	P3-DE1.5-F (23)
Sample Date:									Sample Depth (feet):														
Chloromethane (methyl chloride)	---	---	---	---	---	---	---	---	---	---	<4.27	<5.94	<3.72	<52.6	<89.8	<0.219	<7.32	<8.83	<0.724	<10.2	<0.783	<15.8	
cis-1,2-Dichloroethene	780	20,000	20,000	1,200	1,200	1,200	700	700	0.4	---	<2.14	<2.97	<1.86	<26.3	<44.9	<0.11	<3.66	<4.42	<0.362	<5.08	<0.391	<7.88	
cis-1,3-Dichloropropene	6.4	57	1,200	1.1	2.1	0.39	0.061	0.45	0.004	---	<1.71	<2.38	<1.49	<21	<35.9	<0.11	<3.66	<4.42	<0.289	<4.06	<0.313	<7.88	
Cyclohexanone	390,000 <sup>(2)</sup>	1,000,000 <sup>(2)</sup>	1,000,000 <sup>(2)</sup>	660 <sup>(2)</sup>	660 <sup>(2)</sup>	660 <sup>(2)</sup>	---	---	150 <sup>(2)</sup>	---	<42.7	<59.4	<37.2	<526	<898	<2.19	<73.2	<88.3	<7.24	<102	<7.83	<158	
Dibromochloromethane (chlorodibromomethane)	1,600	41,000	41,000	1,300	1,300	1,300	630	630	0.4	---	<2.14	<2.97	<1.86	<26.3	<44.9	<0.11	<3.66	<4.42	<0.362	<5.08	<0.391	<7.88	
Dibromomethane (methylene bromide)	780 <sup>(2)</sup>	20,000 <sup>(2)</sup>	20,000 <sup>(2)</sup>	2,700 <sup>(2)</sup>	2,700 <sup>(2)</sup>	2,700 <sup>(2)</sup>	---	---	0.34 <sup>(2)</sup>	---	<2.14	<2.97	<1.86	<26.3	<44.9	<0.11	<3.66	<4.42	<0.362	<5.08	<0.391	<7.88	
Dichlorodifluoromethane	16,000 <sup>(2)</sup>	410,000 <sup>(2)</sup>	180,000 <sup>(2)</sup>	190 <sup>(2)</sup>	310 <sup>(2)</sup>	20 <sup>(2)</sup>	6.8	4.2	43 <sup>(2)</sup>	---	<4.27	<5.94	<3.72	<52.6	<89.8	<0.219	<7.32	<8.83	<0.724	<10.2	<0.783	<15.8	
Ethyl acetate	70,000 <sup>(2)</sup>	1,000,000 <sup>(2)</sup>	1,000,000 <sup>(2)</sup>	10,000 <sup>(2)</sup>	10,000 <sup>(2)</sup>	10,000 <sup>(2)</sup>	---	---	26 <sup>(2)</sup>	---	<21.4	<29.7	<18.6	<263	<449	<1.1	<36.6	<44.2	<3.62	<50.8	<3.91	<78.8	
Ethyl ether	16,000 <sup>(2)</sup>	410,000 <sup>(2)</sup>	410,000 <sup>(2)</sup>	8,800 <sup>(2)</sup>	8,800 <sup>(2)</sup>	8,800 <sup>(2)</sup>	---	---	6.1 <sup>(2)</sup>	---	<2.14	<2.97	<1.86	<26.3	<44.9	<0.11	<3.66	<4.42	<0.362	<5.08	<0.391	<7.88	
Ethyl methacrylate	---	---	---	---	---	---	---	---	---	---	<2.14	<2.97	<1.86	<26.3	<44.9	<0.11	<3.66	<4.42	<0.362	<5.08	<0.391	<7.88	
Heptane	---	---	---	---	---	---	---	---	---	---	<8.55	<11.9	<7.44	<105	<180	<0.439	<14.6	<17.7	<1.45	<20.3	<1.57	<31.5	
Hexachlorobutadiene	---	---	---	---	---	---	---	---	---	---	<2.14	<2.97	<1.86	<26.3	<44.9	<0.11	<3.66	<4.42	<0.362	<5.08	<0.391	<7.88	
Hexachloroethane	78	2,000	2,000	---	---	---	160	160	0.5	---	<2.14	<2.97	<1.86	<26.3	<44.9	<0.11	<3.66	<4.42	<0.362	<5.08	<0.391	<7.88	
Iodomethane	---	---	---	---	---	---	---	---	---	---	<4.27	<5.94	<3.72	<52.6	<89.8	<0.219	<7.32	<8.83	<0.724	<10.2	<0.783	<15.8	
Isopropylbenzene (cumene)	7,800 <sup>(2)</sup>	200,000 <sup>(2)</sup>	61,000 <sup>(2)</sup>	500 <sup>(2)</sup>	790 <sup>(2)</sup>	51 <sup>(2)</sup>	21	130	91 <sup>(2)</sup>	---	0.53	<2.97	<1.86	<26.3	<44.9	<0.11	<3.66	<4.42	<0.362	<5.08	0.14	<7.88	
Methacrylonitrile	---	---	---	---	---	---	---	---	---	---	<21.4	<29.7	<18.6	<263	<449	<1.1	<36.6	<44.2	<3.62	<50.8	<3.91	<78.8	
Methyl Methacrylate	---	---	---	---	---	---	---	---	---	---	<2.14	<2.97	<1.86	<26.3	<44.9	<0.11	<3.66	<4.42	<0.362	<5.08	<0.391	<7.88	
Methyl tert-butyl ether	780	20,000	2,000	8,800	8,800	140	2,900	6,300	0.32	---	<0.855	<1.19	<0.744	<10.5	<18	<0.0439	<1.46	<1.77	<0.145	<2.03	<0.157	<3.15	
Methylacrylate	2,300 <sup>(2)</sup>	61,000 <sup>(2)</sup>	6,100 <sup>(2)</sup>	6,500 <sup>(2)</sup>	6,500 <sup>(2)</sup>	6,500 <sup>(2)</sup>	---	---	0.89 <sup>(2)</sup>	---	<4.27	<5.94	<3.72	<52.6	<89.8	<0.219	<7.32	<8.83	<0.724	<10.2	<0.783	<15.8	
Methylene chloride (dichloromethane)	85	760	12,000	13	24	34	1.4	10	0.02	1.4	0.46	<2.97	<1.86	<26.3	<44.9	<0.11	<3.66	<4.42	<0.362	<5.08	<0.391	<7.88	
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	1.8	126	62.5	49.6	430	1560	14	12	83.5	9.5	249	26.1	4.5	
n-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<2.14	<2.97	<1.86	<26.3	<44.9	<0.11	<3.66	<4.42	<0.362	<5.08	<0.391	<7.88	
n-Hexane	---	---	---	290 <sup>(2)</sup>	290 <sup>(2)</sup>	15 <sup>(2)</sup>	---	---	---	---	<8.55	<11.9	<7.44	<105	<180	<0.439	<14.6	<17.7	<1.45	<20.3	<1.57	<31.5	
Nitrobenzene	39	1,000	1,000	92	140	9.4	140	380	0.1	---	<42.7	<59.4	<37.2	<526	<898	<2.19	<73.2	<88.3	<7.24	<102	<7.83	<158	
n-Propylbenzene	---	---	---	---	---	---	---	---	---	---	0.44	<2.97	<1.86	<26.3	<44.9	<0.11	<3.66	<4.42	<0.362	<5.08	<0.391	<7.88	
Pentachloroethane	---	---	---	---	---	---	---	---	---	---	<2.14	<2.97	<1.86	<26.3	<44.9	<0.11	<3.66	<4.42	<0.362	<5.08	<0.391	<7.88	
p-Isopropyltoluene	---	---	---	---	---	---	---	---	---	---	<2.14	<2.97	<1.86	<26.3	<44.9	<0.11	<3.66	<4.42	<0.362	<5.08	<0.391	<7.88	
Propionitrile	---	---	---	---	---	---	---	---	---	---	<21.4	<29.7	<18.6	<263	<449	<1.1	<36.6	<44.2	<3.62	<50.8	<3.91	<78.8	
sec-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<2.14	<2.97	<1.86	<26.3	<44.9	<0.11	<3.66	<4.42	<0.362	<5.08	<0.391	<7.88	
Styrene	16,000	410,000	41,000	1,500	1,500	430	230	230	4	230	<2.14	<2.97	3.36	<26.3	<44.9	2.04	8.4	2.7	<0.362	5.28	<0.391	<7.88	
tert-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<2.14	<2.97	<1.86	<26.3	<44.9	<0.11	<3.66	<4.42	<0.362	<5.08	<0.391	<7.88	
Tetrachloroethene	12	110	2,400	11	20	28	0.24	1.7	0.06	---	<2.14	<2.97	<1.86	<26.3	<44.9	<0.11	<3.66	<4.42	<0.362	<5.08	<0.391	<7.88	
Tetrahydrofuran	---	---	---	---	---	---	---	---	---	---	<21.4	<29.7	<18.6	<263	<449	<1.1	<36.6	<44.2	<3.62	<50.8	<3.91	<78.8	
trans-1,2-Dichloroethene	1,600	41,000	41,000	3,100	3,100	3,100	10	63	0.7	---	<2.14	<2.97	<1.86	<26.3	<44.9	<0.11	<3.66	<4.42	<0.362	<5.08	<0.391	<7.88	
trans-1,3-Dichloropropene	6.4	57	1,200	1.1	2.1	0.39	---	---	0.004	---	<1.71	<2.38	<1.49	<21	<35.9	<0.11	<3.66	<4.42	<0.289	<4.06	<0.313	<7.88	
Trichloroethene	58	520	1,200	5	8.9	12	0.26	1.9	0.06	---	<2.14	<2.97	<1.86	<26.3	<44.9	<0.11	<3.66	<4.42	<0.362	<5.08	<0.391	<7.88	
Trichlorofluoromethane	23,000 <sup>(2)</sup>	610,000 <sup>(2)</sup>	140,000 <sup>(2)</sup>	850 <sup>(2)</sup>	1,400 <sup>(2)</sup>	88 <sup>(2)</sup>	31	190	34 <sup>(2)</sup>	---	<2.14	<2.97	<1.86	<26.3	<44.9	<0.11	<3.66	<4.42	<0.362	<5.08	<0.391	<7.88	
Vinyl acetate	78,000	1,000,000	200,000	1,000	1,600	10	270	1,600	170 <sup>(2)</sup>	---	<21.4	<29.7	<18.6	<263	<449	<1.1	<36.6	<44.2	<3.62	<50.8	<3.91	<78.8	
Vinyl chloride	0.46	7.9	170	0.28	1.1	1.1	0.011	0.15	0.01	---	<0.855	<1.19	<0.744	<10.5	<18	<0.0439	<1.46	<1.77	<0.145	<2.03	<0.157	<3.15	

Notes:  
<sup>(1)</sup> Objectives are for Class I Groundwater.  
<sup>(2)</sup> Non-TACO or provisional ROs provided by the IEPA.  
 --- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.  
 Concentration exceeds one or more project remediation objective.  
 Concentration exceeds one or more project remediation objectives.



Table 5-6  
 Soil Confirmation Sample Analytical Results For Excavation Floor - VOCs  
 Champaign Former MGP  
 Ameren Illinois

Constituent	Soil									Project Remediation Objectives	Sample Location:											
	Soil Ingestion			Soil Inhalation			Indoor Air		Component to Groundwater <sup>(1)</sup>		Sample ID:	P3-E3-F	P3-F2-F	P4-B2-F	P4-B3-F	P4-EF3-F	P4-G2-F	P5-B2-F	P5-B2-F	P5-GH4-F	P5-G2.5-F	P6-B4.5-F
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial			Sample Date:	P3-E3-F (24)	P3-F2-F (23)	P4-B2-F (25)	P4-B3-F (25)	P4-EF3-F (25)	P4-G2-F(26)	P5-B2-F(24)	P5-B2-F(26)	P5-GH4-F(22)	P5-G2.5-F (22)	P6-B4.5-F (25)
Sample Depth (feet):										24	23	25	25	25	26	24	26	22	22	25		
Chloromethane (methyl chloride)	---	---	---	---	---	---	---	---	---	---	<8.61	<6.59	<81.8	<3.28	<0.44	<0.473	<15.8	<4.15	<0.275	<0.238	<0.211	
cis-1,2-Dichloroethene	780	20,000	20,000	1,200	1,200	1,200	700	700	0.4	---	<4.31	<3.3	<40.9	<1.64	<0.22	<0.237	<7.92	<2.08	<0.137	<0.119	<0.106	
cis-1,3-Dichloropropene	6.4	57	1,200	1.1	2.1	0.39	0.061	0.45	0.004	---	<4.31	<3.3	<40.9	<1.64	<0.22	<0.237	<7.92	<2.08	<0.137	<0.119	<0.106	
Cyclohexanone	390,000 <sup>(2)</sup>	1,000,000 <sup>(2)</sup>	1,000,000 <sup>(2)</sup>	660 <sup>(2)</sup>	660 <sup>(2)</sup>	660 <sup>(2)</sup>	---	---	150 <sup>(2)</sup>	---	<86.1	<65.9	<818	<32.8	<4.4	<4.73	<158	<41.5	<2.75	<2.38	<0.211	
Dibromochloromethane (chlorodibromomethane)	1,600	41,000	41,000	1,300	1,300	1,300	630	630	0.4	---	<4.31	<3.3	<40.9	<1.64	<0.22	<0.237	<7.92	<2.08	<0.137	<0.119	<0.106	
Dibromomethane (methylene bromide)	780 <sup>(2)</sup>	20,000 <sup>(2)</sup>	20,000 <sup>(2)</sup>	2,700 <sup>(2)</sup>	2,700 <sup>(2)</sup>	2,700 <sup>(2)</sup>	---	---	0.34 <sup>(2)</sup>	---	<4.31	<3.3	<40.9	<1.64	<0.22	<0.237	<7.92	<2.08	<0.137	<0.119	<0.106	
Dichlorodifluoromethane	16,000 <sup>(2)</sup>	410,000 <sup>(2)</sup>	180,000 <sup>(2)</sup>	190 <sup>(2)</sup>	310 <sup>(2)</sup>	20 <sup>(2)</sup>	6.8	4.2	43 <sup>(2)</sup>	---	<8.61	<6.59	<81.8	<3.28	<0.44	<0.473	<15.8	<4.15	<0.275	<0.238	<0.211	
Ethyl acetate	70,000 <sup>(2)</sup>	1,000,000 <sup>(2)</sup>	1,000,000 <sup>(2)</sup>	10,000 <sup>(2)</sup>	10,000 <sup>(2)</sup>	10,000 <sup>(2)</sup>	---	---	26 <sup>(2)</sup>	---	<43.1	<33	<409	<16.4	1.1	1.1	<79.2	<20.8	0.83	700	0.73	
Ethyl ether	16,000 <sup>(2)</sup>	410,000 <sup>(2)</sup>	410,000 <sup>(2)</sup>	8,800 <sup>(2)</sup>	8,800 <sup>(2)</sup>	8,800 <sup>(2)</sup>	---	---	6.1 <sup>(2)</sup>	---	<4.31	<3.3	<40.9	<1.64	<0.22	<0.237	<7.92	<2.08	<0.137	<0.119	<0.106	
Ethyl methacrylate	---	---	---	---	---	---	---	---	---	---	<4.31	<3.3	<40.9	<1.64	<0.22	<0.237	<7.92	<2.08	<0.137	<0.119	<0.106	
Heptane	---	---	---	---	---	---	---	---	---	---	<17.2	<13.2	<164	<6.56	<0.879	<0.947	<31.7	<8.31	<0.549	<0.476	<0.422	
Hexachlorobutadiene	---	---	---	---	---	---	---	---	---	---	<4.31	<3.3	<40.9	<1.64	<0.22	<0.237	<7.92	<2.08	<0.137	<0.119	<0.106	
Hexachloroethane	78	2,000	2,000	---	---	---	160	160	0.5	---	<4.31	<3.3	<40.9	<1.64	<0.22	<0.237	<7.92	<2.08	<0.137	<0.119	<0.106	
Iodomethane	---	---	---	---	---	---	---	---	---	---	<8.61	<6.59	<81.8	<3.28	<0.44	<0.473	<15.8	<4.15	<0.275	<0.238	<0.211	
Isopropylbenzene (cumene)	7,800 <sup>(2)</sup>	200,000 <sup>(2)</sup>	61,000 <sup>(2)</sup>	500 <sup>(2)</sup>	790 <sup>(2)</sup>	51 <sup>(2)</sup>	21	130	91 <sup>(2)</sup>	---	<4.31	<3.3	<40.9	<1.64	<0.22	<0.237	<7.92	<2.08	<0.137	<0.119	0.021	
Methacrylonitrile	---	---	---	---	---	---	---	---	---	---	<43.1	<33	<409	<16.4	<2.2	<2.37	<79.2	<20.8	<1.37	<1.19	<1.06	
Methyl Methacrylate	---	---	---	---	---	---	---	---	---	---	<4.31	<3.3	<40.9	<1.64	<0.22	<0.237	<7.92	<2.08	<0.137	<0.119	<0.106	
Methyl tert-butyl ether	780	20,000	2,000	8,800	8,800	140	2,900	6,300	0.32	---	<1.72	<1.32	<16.4	<0.656	<0.0879	<0.0947	<3.17	<0.831	<0.0549	<0.0476	<0.0422	
Methylacrylate	2,300 <sup>(2)</sup>	61,000 <sup>(2)</sup>	6,100 <sup>(2)</sup>	6,500 <sup>(2)</sup>	6,500 <sup>(2)</sup>	6,500 <sup>(2)</sup>	---	---	0.89 <sup>(2)</sup>	---	<8.61	<6.59	<81.8	<3.28	<0.44	<0.473	<15.8	<4.15	<0.275	<0.238	<0.211	
Methylene chloride (dichloromethane)	85	760	12,000	13	24	34	1.4	10	0.02	1.4	<4.31	0.67	<40.9	<1.64	<0.22	<0.237	1.9	0.53	0.048	<0.119	<0.106	
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	1.8	405	116	99.2	38.1	6.38	9.01	<15.8	<4.15	<0.275	<0.238	28.3	
n-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<4.31	<3.3	<40.9	<1.64	<0.22	<0.237	<7.92	<2.08	<0.137	<0.119	<0.106	
n-Hexane	---	---	---	290 <sup>(2)</sup>	290 <sup>(2)</sup>	15 <sup>(2)</sup>	---	---	---	---	<17.2	<13.2	<164	<6.56	<0.879	<0.947	<31.7	<8.31	<0.549	<0.476	<0.422	
Nitrobenzene	39	1,000	1,000	92	140	9.4	140	380	0.1	---	<86.1	<65.9	<818	<32.8	<4.4	<4.73	<158	<41.5	<2.75	<2.38	<2.11	
n-Propylbenzene	---	---	---	---	---	---	---	---	---	---	<4.31	<3.3	<40.9	<1.64	<0.22	<0.237	<7.92	<2.08	<0.137	<0.119	0.095	
Pentachloroethane	---	---	---	---	---	---	---	---	---	---	<4.31	<3.3	<40.9	<1.64	<0.22	<0.237	<7.92	<2.08	<0.137	<0.119	<0.106	
p-Isopropyltoluene	---	---	---	---	---	---	---	---	---	---	<4.31	<3.3	<40.9	<1.64	<0.22	<0.237	<7.92	<2.08	<0.137	<0.119	<0.106	
Propionitrile	---	---	---	---	---	---	---	---	---	---	<43.1	<33	<409	<16.4	<2.2	<2.37	<79.2	<20.8	<1.37	<1.19	<1.06	
sec-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<4.31	<3.3	<40.9	<1.64	<0.22	<0.237	<7.92	<2.08	<0.137	<0.119	<0.106	
Styrene	16,000	410,000	41,000	1,500	1,500	430	230	230	4	230	8.22	5.81	<40.9	3.07	<0.22	0.048	<7.92	<2.08	<0.137	<0.119	1.46	
tert-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<4.31	<3.3	<40.9	<1.64	<0.22	<0.237	<7.92	<2.08	<0.137	<0.119	<0.106	
Tetrachloroethene	12	110	2,400	11	20	28	0.24	1.7	0.06	---	<4.31	<3.3	<40.9	<1.64	<0.22	<0.237	<7.92	<2.08	<0.137	<0.119	<0.106	
Tetrahydrofuran	---	---	---	---	---	---	---	---	---	---	<43.1	<33	<409	<16.4	<2.2	<2.37	<79.2	<20.8	<1.37	<1.19	<1.06	
trans-1,2-Dichloroethene	1,600	41,000	41,000	3,100	3,100	3,100	10	63	0.7	---	<4.31	<3.3	<40.9	<1.64	<0.22	<0.237	<7.92	<2.08	<0.137	<0.119	<0.106	
trans-1,3-Dichloropropene	6.4	57	1,200	1.1	2.1	0.39	---	---	0.004	---	<4.31	<3.3	<40.9	<1.64	<0.22	<0.237	<7.92	<2.08	<0.137	<0.119	<0.106	
Trichloroethene	58	520	1,200	5	8.9	12	0.26	1.9	0.06	---	<4.31	<3.3	<40.9	<1.64	<0.22	<0.237	<7.92	<2.08	<0.137	<0.119	<0.106	
Trichlorofluoromethane	23,000 <sup>(2)</sup>	610,000 <sup>(2)</sup>	140,000 <sup>(2)</sup>	850 <sup>(2)</sup>	1,400 <sup>(2)</sup>	88 <sup>(2)</sup>	31	190	34 <sup>(2)</sup>	---	<4.31	<3.3	<40.9	<1.64	<0.22	<0.237	<7.92	<2.08	<0.137	<0.119	<0.106	
Vinyl acetate	78,000	1,000,000	200,000	1,000	1,600	10	270	1,600	170 <sup>(2)</sup>	---	<43.1	<33	<409	<16.4	<2.2	<2.37	<79.2	<20.8	<1.37	<1.19	<1.06	
Vinyl chloride	0.46	7.9	170	0.28	1.1	1.1	0.011	0.15	0.01	---	<1.72	<1.32	<16.4	<0.656	<0.0879	<0.0947	<3.17	<0.831	<0.0549	<0.0476	<0.0422	

Notes:  
<sup>(1)</sup> Objectives are for Class I Groundwater.  
<sup>(2)</sup> Non-TACO or provisional ROs provided by the IEPA.  
 --- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.  
 Concentration exceeds one or more project remediation objective.  
 Concentration exceeds one or more project remediation objectives.

Table 5-6  
Soil Confirmation Sample Analytical Results For Excavation Floor - VOCs  
Champaign Former MGP  
Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component to Groundwater <sup>(1)</sup>	Project Remediation Objectives	Sample Location:	P9-G1.5-F	P9-DE1.5-F
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial			Sample ID:	P9-G1.5-F (14)	P9-DE1.5-F (16)
											Sample Depth (feet):	14	16
<b><i>Volatile Organic Compounds (mg/kg)</i></b>													
1,1,1,2-Tetrachloroethane	2,300 <sup>(2)</sup>	61,000 <sup>(2)</sup>	6,100 <sup>(2)</sup>	2,100 <sup>(2)</sup>	2,100 <sup>(2)</sup>	2,100 <sup>(2)</sup>	---	---	3.4 <sup>(2)</sup>	---		<0.103	<0.371
1,1,1-Trichloroethane	---	---	---	1,200	1,200	1,200	560	560	2	---		<0.103	<0.371
1,1,2,2-Tetrachloroethane	4,700 <sup>(2)</sup>	120,000 <sup>(2)</sup>	12,000 <sup>(2)</sup>	2,000 <sup>(2)</sup>	2,000 <sup>(2)</sup>	2,000 <sup>(2)</sup>	---	---	3.3 <sup>(2)</sup>	---		<0.103	<0.371
1,1,2-Trichloro-1,2,2-trifluoroethane	---	---	---	---	---	---	---	---	---	---		<0.103	<0.371
1,1,2-Trichloroethane	310	8,200	8,200	1,800	1,800	1,800	900	900	0.02	---		<0.103	<0.371
1,1-Dichloro-2-propanone	---	---	---	---	---	---	---	---	---	---		<1.03	<3.71
1,1-Dichloroethane	7,800	200,000	200,000	1,300	1,700	130	110	670	23	---		<0.103	<0.371
1,1-Dichloroethene	3,900	100,000	470	290	10,000	3	13	77	0.06	---		<0.103	<0.371
1,1-Dichloropropene	---	---	---	---	---	---	---	---	---	---		<0.103	<0.371
1,2,3-Trichlorobenzene	---	---	---	---	---	---	---	---	---	---		<0.103	<0.371
1,2,3-Trichloropropane	0.092 <sup>(2)</sup>	0.82 <sup>(2)</sup>	18	730 <sup>(2)</sup>	730 <sup>(2)</sup>	730 <sup>(2)</sup>	---	---	0.0001 <sup>(2)</sup>	---		<0.207	<0.743
1,2,3-Trimethylbenzene	---	---	---	---	---	---	---	---	---	---		0.384	0.33
1,2,4-Trichlorobenzene	780	20,000	2,000	3,200	3,200	920	220	980	5	---		<0.103	<0.371
1,2,4-Trimethylbenzene	3,900 <sup>(2)</sup>	100,000 <sup>(2)</sup>	100,000 <sup>(2)</sup>	73 <sup>(2)</sup>	120 <sup>(2)</sup>	0.25 <sup>(2)</sup>	---	---	18 <sup>(2)</sup>	---		0.179	0.434
1,2-Dibromo-3-chloropropane	0.46	4	89	11	17	0.11	0.0073	0.054	0.002	---		<0.103	<0.371
1,2-Dibromoethane (EDB)	0.32	2.9	62	0.06	0.12	0.16	0.022	0.16	0.0004	---		<0.103	<0.371
1,2-Dichlorobenzene	7,000	180,000	18,000	560	560	310	200	200	17	---		<0.103	<0.371
1,2-Dichloroethane	7	63	1,400	0.4	0.7	0.99	0.066	0.48	0.02	---		<0.103	<0.371
1,2-Dichloropropane	9	84	1,800	15	23	0.5	0.023	0.17	0.03	---		<0.103	<0.371
1,3,5-Trimethylbenzene	3,900 <sup>(2)</sup>	100,000 <sup>(2)</sup>	100,000 <sup>(2)</sup>	45 <sup>(2)</sup>	72 <sup>(2)</sup>	0.15 <sup>(2)</sup>	---	---	10 <sup>(2)</sup>	---		<0.103	<0.371
1,3-Dichlorobenzene	---	---	---	---	---	---	---	---	---	---		<0.103	<0.371
1,3-Dichloropropane	1,600 <sup>(2)</sup>	41,000 <sup>(2)</sup>	41,000 <sup>(2)</sup>	1,000 <sup>(2)</sup>	1,000 <sup>(2)</sup>	1,000 <sup>(2)</sup>	---	---	0.83 <sup>(2)</sup>	---		<0.103	<0.371
1,4-Dichlorobenzene	---	---	---	11,000	17,000	340	1.3	9.8	2	---		<0.103	<0.371
1-Chlorobutane	3,100 <sup>(2)</sup>	82,000 <sup>(2)</sup>	14,000 <sup>(2)</sup>	1,200 <sup>(2)</sup>	1,200 <sup>(2)</sup>	1,200 <sup>(2)</sup>	---	---	3.1 <sup>(2)</sup>	---		<0.103	<0.371
2,2-Dichloropropane	---	---	---	---	---	---	---	---	---	---		<0.103	<0.371
2-Butanone (methyl ethyl ketone)	47,000 <sup>(2)</sup>	1,000,000 <sup>(2)</sup>	120,000 <sup>(2)</sup>	25,000 <sup>(2)</sup>	25,000 <sup>(2)</sup>	710 <sup>(2)</sup>	23,000	23,000	17 <sup>(2)</sup>	---		<1.03	<3.71
2-Chlorotoluene (o-chlorotoluene)	1,600 <sup>(2)</sup>	41,000 <sup>(2)</sup>	41,000 <sup>(2)</sup>	1,400 <sup>(2)</sup>	1,400 <sup>(2)</sup>	1,400 <sup>(2)</sup>	---	---	4 <sup>(2)</sup>	---		<0.103	<0.371
2-Hexanone	---	---	---	---	---	---	---	---	---	---		<1.03	<3.71
2-Nitropropane	---	---	---	---	---	---	---	---	---	---		<1.03	<3.71
4-Chlorotoluene	---	---	---	---	---	---	---	---	---	---		<0.103	<0.371
4-Methyl-2-pentanone (MIBK)	---	---	---	3,100 <sup>(2)</sup>	3,100 <sup>(2)</sup>	340 <sup>(2)</sup>	---	---	---	---		<1.03	<3.71
Acetone	70,000	---	---	100,000	100,000	100,000	100,000	100,000	25	7,800		<1.03	<3.71
Acrolein	39 <sup>(2)</sup>	1,000 <sup>(2)</sup>	1,600 <sup>(2)</sup>	0.16 <sup>(2)</sup>	0.26 <sup>(2)</sup>	0.017 <sup>(2)</sup>	---	---	0.014 <sup>(2)</sup>	---		<2.07	<7.43
Acrylonitrile	1.2 <sup>(2)</sup>	11 <sup>(2)</sup>	230 <sup>(2)</sup>	0.28 <sup>(2)</sup>	0.54 <sup>(2)</sup>	0.17 <sup>(2)</sup>	---	---	0.0006 <sup>(2)</sup>	---		<0.207	<0.743
Allyl chloride	---	---	---	---	---	---	---	---	---	---		<0.103	<0.371
Bromobenzene	1,600 <sup>(2)</sup>	41,000 <sup>(2)</sup>	41,000 <sup>(2)</sup>	100 <sup>(2)</sup>	160 <sup>(2)</sup>	11 <sup>(2)</sup>	---	---	2.2 <sup>(2)</sup>	---		<0.103	<0.371
Bromochloromethane	---	---	---	---	---	---	---	---	---	---		<0.103	<0.371
Bromodichloromethane	10	92	2,000	3,000	3,000	3,000	1,400	1,400	0.6	---		<0.103	<0.371
Bromoform	81	720	16,000	53	100	140	49	360	0.8	---		<0.103	<0.371
Bromomethane (methyl bromide)	110	2,900	1,000	10	15	3.9	0.71	4.3	0.2	---		<0.207	<0.743
Carbon disulfide	7,800	200,000	20,000	720	720	9	38	230	32	---		<0.103	<0.371
Carbon tetrachloride	5	44	410	0.3	0.64	0.9	0.021	0.15	0.07	---		<0.103	<0.371
Chlorobenzene	1,600	41,000	4,100	130	210	1.3	54	330	1	---		<0.103	<0.371
Chloroethane	---	---	---	---	---	---	---	---	---	---		<0.207	<0.743
Chloroform	100	940	2,000	0.3	0.54	0.76	0.028	0.2	0.6	---		<0.103	<0.371

Notes:

<sup>(1)</sup> Objectives are for Class I Groundwater.

<sup>(2)</sup> Non-TACO or provisional ROs provided by the IEPA.

--- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.

Concentration exceeds one or more project remediation objective.

Concentration exceeds one or more project remediation objectives.



Table 5-6  
Soil Confirmation Sample Analytical Results For Excavation Floor - VOCs  
Champaign Former MGP  
Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component to Groundwater <sup>(1)</sup>	Project Remediation Objectives	Sample Location:	P9-G1.5-F	P9-DE1.5-F
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial			Sample ID:	P9-G1.5-F (14)	P9-DE1.5-F (16)
											Sample Date:	5/13/2011	6/1/2011
											Sample Depth (feet):	14	16
Chloromethane (methyl chloride)	---	---	---	---	---	---	---	---	---	---	<0.207	<0.743	
cis-1,2-Dichloroethene	780	20,000	20,000	1,200	1,200	1,200	700	700	0.4	---	<0.103	<0.371	
cis-1,3-Dichloropropene	6.4	57	1,200	1.1	2.1	0.39	0.061	0.45	0.004	---	<0.0828	<0.297	
Cyclohexanone	390,000 <sup>(2)</sup>	1,000,000 <sup>(2)</sup>	1,000,000 <sup>(2)</sup>	660 <sup>(2)</sup>	660 <sup>(2)</sup>	660 <sup>(2)</sup>	---	---	150 <sup>(2)</sup>	---	<2.07	<7.43	
Dibromochloromethane (chlorodibromomethane)	1,600	41,000	41,000	1,300	1,300	1,300	630	630	0.4	---	<0.103	<0.371	
Dibromomethane (methylene bromide)	780 <sup>(2)</sup>	20,000 <sup>(2)</sup>	20,000 <sup>(2)</sup>	2,700 <sup>(2)</sup>	2,700 <sup>(2)</sup>	2,700 <sup>(2)</sup>	---	---	0.34 <sup>(2)</sup>	---	<0.103	<0.371	
Dichlorodifluoromethane	16,000 <sup>(2)</sup>	410,000 <sup>(2)</sup>	180,000 <sup>(2)</sup>	190 <sup>(2)</sup>	310 <sup>(2)</sup>	20 <sup>(2)</sup>	6.8	4.2	43 <sup>(2)</sup>	---	<0.207	<0.743	
Ethyl acetate	70,000 <sup>(2)</sup>	1,000,000 <sup>(2)</sup>	1,000,000 <sup>(2)</sup>	10,000 <sup>(2)</sup>	10,000 <sup>(2)</sup>	10,000 <sup>(2)</sup>	---	---	26 <sup>(2)</sup>	---	<1.03	<3.71	
Ethyl ether	16,000 <sup>(2)</sup>	410,000 <sup>(2)</sup>	410,000 <sup>(2)</sup>	8,800 <sup>(2)</sup>	8,800 <sup>(2)</sup>	8,800 <sup>(2)</sup>	---	---	6.1 <sup>(2)</sup>	---	<0.103	<0.371	
Ethyl methacrylate	---	---	---	---	---	---	---	---	---	---	<0.103	<0.371	
Heptane	---	---	---	---	---	---	---	---	---	---	<0.414	<1.49	
Hexachlorobutadiene	---	---	---	---	---	---	---	---	---	---	<0.103	<0.371	
Hexachloroethane	78	2,000	2,000	---	---	---	160	160	0.5	---	<0.103	<0.371	
Iodomethane	---	---	---	---	---	---	---	---	---	---	<0.207	<0.743	
Isopropylbenzene (cumene)	7,800 <sup>(2)</sup>	200,000 <sup>(2)</sup>	61,000 <sup>(2)</sup>	500 <sup>(2)</sup>	790 <sup>(2)</sup>	51 <sup>(2)</sup>	21	130	91 <sup>(2)</sup>	---	<0.103	<0.371	
Methacrylonitrile	---	---	---	---	---	---	---	---	---	---	<1.03	<3.71	
Methyl Methacrylate	---	---	---	---	---	---	---	---	---	---	<0.103	<0.371	
Methyl tert-butyl ether	780	20,000	2,000	8,800	8,800	140	2,900	6,300	0.32	---	<0.0414	<0.149	
Methylacrylate	2,300 <sup>(2)</sup>	61,000 <sup>(2)</sup>	6,100 <sup>(2)</sup>	6,500 <sup>(2)</sup>	6,500 <sup>(2)</sup>	6,500 <sup>(2)</sup>	---	---	0.89 <sup>(2)</sup>	---	<0.207	<0.743	
Methylene chloride (dichloromethane)	85	760	12,000	13	24	34	1.4	10	0.02	1.4	<0.103	<0.371	
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	1.8	3.89	5.24	
n-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<0.103	<0.371	
n-Hexane	---	---	---	290 <sup>(2)</sup>	290 <sup>(2)</sup>	15 <sup>(2)</sup>	---	---	---	---	<0.414	<1.49	
Nitrobenzene	39	1,000	1,000	92	140	9.4	140	380	0.1	---	<2.07	<7.43	
n-Propylbenzene	---	---	---	---	---	---	---	---	---	---	<0.103	<0.371	
Pentachloroethane	---	---	---	---	---	---	---	---	---	---	<0.103	<0.371	
p-Isopropyltoluene	---	---	---	---	---	---	---	---	---	---	<0.103	<0.371	
Propionitrile	---	---	---	---	---	---	---	---	---	---	<1.03	<3.71	
sec-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<0.103	<0.371	
Styrene	16,000	410,000	41,000	1,500	1,500	430	230	230	4	230	<0.103	<0.371	
tert-Butylbenzene	---	---	---	---	---	---	---	---	---	---	<0.103	<0.371	
Tetrachloroethene	12	110	2,400	11	20	28	0.24	1.7	0.06	---	<0.103	<0.371	
Tetrahydrofuran	---	---	---	---	---	---	---	---	---	---	<1.03	<3.71	
trans-1,2-Dichloroethene	1,600	41,000	41,000	3,100	3,100	3,100	10	63	0.7	---	<0.103	<0.371	
trans-1,3-Dichloropropene	6.4	57	1,200	1.1	2.1	0.39	---	---	0.004	---	<0.0828	<0.297	
Trichloroethene	58	520	1,200	5	8.9	12	0.26	1.9	0.06	---	<0.103	<0.371	
Trichlorofluoromethane	23,000 <sup>(2)</sup>	610,000 <sup>(2)</sup>	140,000 <sup>(2)</sup>	850 <sup>(2)</sup>	1,400 <sup>(2)</sup>	88 <sup>(2)</sup>	31	190	34 <sup>(2)</sup>	---	<0.103	<0.371	
Vinyl acetate	78,000	1,000,000	200,000	1,000	1,600	10	270	1,600	170 <sup>(2)</sup>	---	<1.03	<3.71	
Vinyl chloride	0.46	7.9	170	0.28	1.1	1.1	0.011	0.15	0.01	---	<0.0414	<0.149	

Notes:

<sup>(1)</sup> Objectives are for Class I Groundwater.

<sup>(2)</sup> Non-TACO or provisional ROs provided by the IEPA.

--- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.  
Concentration exceeds one or more project remediation objective.

3.89 5.24 Concentration exceeds one or more project remediation objectives.



Table 5-7  
Soil Confirmation Sample Analytical Results For Excavation Floor - SVOCs  
Champaign Former MGP  
Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component to Groundwater <sup>(1)</sup>	Project Remediation Objectives	Sample Location:	P3-F2-F	P4-B3-F
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial			Sample ID:	P3-F2-F (23)	P4-B3-F (25)
											Sample Date:	2/3/2010	4/7/2010
											Sample Depth (feet):	23	25
<b>Semivolatile Organic Compounds (mg/kg)</b>													
1,2,4-Trichlorobenzene	780	20,000	2,000	3,200	3,200	920	220	980	5	---		<1.68	<2.77
1,2-Dichlorobenzene	7,000	180,000	18,000	560	560	310	200	200	17	---		<1.68	<2.77
1,2-Diphenylhydrazine	---	---	---	---	---	---	---	---	---	---		<2.81	<4.66
1,3-Dichlorobenzene	---	---	---	---	---	---	---	---	---	---		<1.68	<2.77
1,4-Dichlorobenzene	---	---	---	11,000	17,000	340	1.3	9.8	2	---		<1.68	<2.77
2,4,5-Trichlorophenol	7,800	200,000	200,000	---	---	---	---	---	130	---		<1.17	<1.94
2,4,6-Trichlorophenol	58	520	11,000	200	390	540	---	---	0.09	---		<1.17	<1.94
2,4-Dichlorophenol	230	6,100	610	---	---	---	---	---	0.86	---		<1.68	<2.77
2,4-Dimethylphenol	1,600	41,000	41,000	---	---	---	---	---	9	---		0.73	<2.77
2,4-Dinitrophenol	160	4,100	410	---	---	---	---	---	0.2	---		<3.35	<5.55
2,4-Dinitrotoluene	0.9	8.4	180	---	---	---	---	---	0.0008	---		<1.17	<1.94
2,6-Dinitrotoluene	0.9	8.4	180	---	---	---	---	---	0.0007	---		<1.17	<1.94
2-Chloronaphthalene (beta-chloronaphthalene)	6,300 <sup>(2)</sup>	160,000 <sup>(2)</sup>	160,000 <sup>(2)</sup>	---	---	---	---	---	49 <sup>(2)</sup>	---		<1.17	<1.94
2-Chlorophenol	390	10,000	10,000	53,000	53,000	53,000	49,000	49,000	4	---		<1.68	<2.77
2-Methoxy-4-methylphenol	---	---	---	---	---	---	---	---	---	---		<2.18	<3.61
2-Methylnaphthalene	310 <sup>(2)</sup>	8,200 <sup>(2)</sup>	820 <sup>(2)</sup>	---	---	---	---	83	83	7.2 <sup>(2)</sup>	83	16.4	11.3
2-Nitroaniline	230 <sup>(2)</sup>	6,100 <sup>(2)</sup>	610 <sup>(2)</sup>	35 <sup>(2)</sup>	56 <sup>(2)</sup>	3.6 <sup>(2)</sup>	---	---	0.14 <sup>(2)</sup>	---		<3.35	<5.55
2-Nitrophenol	---	---	---	---	---	---	---	---	---	---		<1.17	<1.94
3,3'-Dichlorobenzidine	1	13	280	---	---	---	---	---	0.007	---		<1.17	<1.94
3-Nitroaniline	23 <sup>(2)</sup>	610 <sup>(2)</sup>	61 <sup>(2)</sup>	250 <sup>(2)</sup>	400 <sup>(2)</sup>	26 <sup>(2)</sup>	---	---	0.01 <sup>(2)</sup>	---		<3.35	<5.55
4,6-Dinitro-2-methylphenol	7.8	200	820	---	---	---	---	---	0.0031	---		<3.35	<5.55
4-Bromophenyl phenyl ether	---	---	---	---	---	---	---	---	---	---		<1.17	<1.94
4-Chloro-3-methylphenol	---	---	---	---	---	---	---	---	---	---		<1.68	<2.77
4-Chloroaniline (p-chloroaniline)	310	8,200	820	---	---	---	---	---	0.7	---		<1.68	<2.77
4-Chlorophenyl phenyl ether	---	---	---	---	---	---	---	---	---	---		<1.17	<1.94
4-Nitroaniline (p-nitroaniline)	230 <sup>(2)</sup>	6,100 <sup>(2)</sup>	610 <sup>(2)</sup>	1,000 <sup>(2)</sup>	1,600 <sup>(2)</sup>	110 <sup>(2)</sup>	---	---	0.1 <sup>(2)</sup>	---		<1.68	<2.77
4-Nitrophenol	630 <sup>(2)</sup>	16,000 <sup>(2)</sup>	16,000 <sup>(2)</sup>	---	---	---	---	---	0.24 <sup>(2)</sup>	---		<1.17	<1.94
Aniline	110 <sup>(2)</sup>	1,000 <sup>(2)</sup>	1,400 <sup>(2)</sup>	81 <sup>(2)</sup>	130 <sup>(2)</sup>	8.4 <sup>(2)</sup>	---	---	0.063 <sup>(2)</sup>	---		<1.68	<2.77
Azobenzene	---	---	---	---	---	---	---	---	---	---		<1.17	<1.94
Benzidine	0.003 <sup>(2)</sup>	0.02 <sup>(2)</sup>	0.54 <sup>(2)</sup>	0.009 <sup>(2)</sup>	0.02 <sup>(2)</sup>	0.02 <sup>(2)</sup>	---	---	0.0000022	---		<3.54	<5.86
Benzoic acid	310,000	1,000,000	820,000	---	---	---	---	---	400	---		<5.03	<8.32
Benzyl alcohol	39,000 <sup>(2)</sup>	1,000,000 <sup>(2)</sup>	200,000 <sup>(2)</sup>	6,100 <sup>(2)</sup>	6,100 <sup>(2)</sup>	6,100 <sup>(2)</sup>	---	---	15 <sup>(2)</sup>	---		<1.68	<2.77
Bis(2-chloroethoxy)methane	---	---	---	---	---	---	---	---	---	---		<1.17	<1.94
Bis(2-chloroethyl)ether	0.6	5	75	0.2	0.47	0.66	0.5	3.7	0.0004	---		<1.68	<2.77
Bis(2-chloroisopropyl)ether	3,100 <sup>(2)</sup>	82,000 <sup>(2)</sup>	8,200 <sup>(2)</sup>	1,300 <sup>(2)</sup>	1,300 <sup>(2)</sup>	1,300 <sup>(2)</sup>	---	---	2.4 <sup>(2)</sup>	---		<1.17	<1.94
Butyl benzyl phthalate	16,000	410,000	410,000	930	930	930	---	---	930	---		<1.17	<1.94
Carbazole	32	290	6,200	---	---	---	---	---	0.6	---		<1.68	<2.77
Dibenzofuran	160 <sup>(2)</sup>	4,100 <sup>(2)</sup>	4,100 <sup>(2)</sup>	---	---	---	---	---	6.1 <sup>(2)</sup>	310		0.78	<1.94
Diethyl phthalate	63,000	1,000,000	1,000,000	2,000	2,000	2,000	---	---	470	---		<1.68	<2.77
Dimethyl phthalate	---	---	---	---	---	---	---	---	---	---		<1.17	<1.94
Di-n-butyl phthalate	7,800	200,000	200,000	2,300	2,300	2,300	---	---	2,300	---		<1.17	<1.94
Di-n-octyl phthalate	1,600	41,000	4,100	10,000	10,000	10,000	---	---	10,000	---		<1.17	<1.94
Hexachlorobenzene	0.4	4	78	1	1.8	2.6	0.25	0.25	2	---		<1.17	<1.94
Hexachlorobutadiene	---	---	---	---	---	---	---	---	---	---		<1.68	<2.77
Hexachlorocyclopentadiene	550	14,000	14,000	10	16	1.1	5	30	400	---		<1.17	<1.94
Hexachloroethane	78	2,000	2,000	---	---	---	160	160	0.5	---		<1.68	<2.77
Isophorone	15,600	410,000	410,000	4,600	4,600	4,600	1,800	1,800	8	---		<1.17	<1.94
m,p-Cresol	390 <sup>(3)</sup>	10,000 <sup>(3)</sup>	1,000 <sup>(3)</sup>	8,100 <sup>(4)</sup>	8,100 <sup>(4)</sup>	8,100 <sup>(4)</sup>	---	---	0.2 <sup>(3)</sup>	---		3.69	<2.77
Nitrobenzene	39	1,000	1,000	92	140	9.4	140	380	0.1	---		<1.68	<2.77
N-Nitrosodimethylamine	0.013 <sup>(2)</sup>	0.11 <sup>(2)</sup>	1.6 <sup>(2)</sup>	0.012 <sup>(2)</sup>	0.023 <sup>(2)</sup>	0.032 <sup>(2)</sup>	---	---	0.0000067 <sup>(2)</sup>	---		<1.68	<2.77
N-Nitroso-di-n-propylamine	0.09	0.8	18	---	---	---	---	---	0.00005	---		<1.68	<2.77
N-Nitrosodiphenylamine	130	1,200	25,000	---	---	---	---	---	1	---		<1.68	<2.77
o-Cresol	3,900	100,000	100,000	---	---	---	4,800	4,800	15	---		3.67	<2.77
Pentachlorophenol	3	24	520	---	---	---	---	---	0.03	---		<6.7	<11.1
Phenol	23,000	610,000	61,000	---	---	---	12,000	12,000	100	---		1.35	<1.94
Pyridine	78 <sup>(4)</sup>	2,000 <sup>(4)</sup>	2,000 <sup>(4)</sup>	200,000 <sup>(4)</sup>	200,000 <sup>(4)</sup>	200,000 <sup>(4)</sup>	---	---	0.032 <sup>(4)</sup>	---		<1.68	<2.77

Notes:

<sup>(1)</sup> Objectives are for Class I Groundwater.

<sup>(2)</sup> Non-TACO or provisional ROs provided by the IEPA.

<sup>(3)</sup> Objective is for p-cresol.

<sup>(4)</sup> Objective is for m-cresol.

--- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.

--- Concentration exceeds one or more project remediation objective.

Table 5-8  
Soil Confirmation Sample Analytical Results For Excavation Floor - Inorganics  
Champaign Former MGP  
Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component to Groundwater <sup>(1)</sup>	IEPA Accepted Background Levels for non-MSA	Project Remediation Objective	Location:	P6-B4.5-F	P6-D4.5-F
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial				Sample ID:	P6-B4.5-F (25)	P6-D4.5-F(25)
												Depth (feet):	25	25
<b><i>RCRA Metals (mg/kg)</i></b>														
Mercury	23	610	61	10	16	0.10	0.45	0.45	6.4	0.06	0.1		0.01	0.006
Selenium	390	10,000	1,000	---	---	---	---	---	3.3	0.48	---		<4.0	<0.545
Arsenic	13.0	13.0	61.0	750	1,200	25,000	---	---	30	13	13		14.3	2.6
Barium	5,500	140,000	14,000	690,000	910,000	870,000	---	---	1,800	110	---		15.6	73.4
Cadmium	78	2,000	200	1,800	2,800	59,000	---	---	59	0.6	---		0.34	0.17
Chromium	230	6,100	4,100	270	420	690	---	---	32	16.2	230		11.3	41.4
Lead	400	800	700	---	---	---	---	---	107	36	400		10.9	7.67
Silver	390	10,000	1,000	---	---	---	---	---	39	0.55	---		0.65	0.67
Cyanide (Amenable)	1,600	41,000	4,100	---	---	---	---	---	40	0.51	1,600		<0.555	<0.555
Cyanide (Total)	---	---	---	---	---	---	---	---	---	---	---		<0.55	<0.56

Notes:

<sup>(1)</sup> Objectives are for Class I Groundwater.

Concentration exceeds one or more project remediation objective.

Table 5-9  
Perimeter Soil Sample Analytical Results - BTEX and PNAs  
Champaign Former MGP  
Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component to Groundwater <sup>(3)</sup>	IEPA Accepted Background Levels for MSA	Project Remediation Objectives	Sample Location: Sample ID: Sample Date: Sample Depth (feet):	PA1-01	PA1-02	PA1-03	PA3-05	PA3-09	PA3-10	PA3-11	PA3-12	PA4-00	PA4-01 <sup>(b)</sup>	PA4-01 <sup>(b)</sup>
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial					PA1-01 (3)	PA1-02 (3)	PA1-03 (3)	PA3-05	PA3-09	PA3-10	PA3-11	PA3-12	PA4-00 (10)	PA4-01	PA4-01 (3)
<b><i>BTEX Constituents (mg/kg)</i></b>																							
Benzene	12	100	2,300	0.8	1.6	2.2	0.069	0.51	0.03	---	0.069	6/9/2011	3	3	3	3	3	3	3	3	10	3	3
Ethylbenzene	7,800	200,000	20,000	400	400	58	130	130	13	---	58	6/9/2011	3	3	3	3	3	3	3	3	10	3	3
Toluene	16,000	410,000	410,000	650	650	42	240	240	12	---	42	6/9/2011	3	3	3	3	3	3	3	3	10	3	3
m,p-Xylenes	16,000	410,000	41,000	420 <sup>(1)</sup>	420 <sup>(1)</sup>	5.9 <sup>(2)</sup>	75 <sup>(2)</sup>	120 <sup>(2)</sup>	200 <sup>(2)</sup>	---	---	6/9/2011	3	3	3	3	3	3	3	3	10	3	3
o-Xylene	16,000	410,000	41,000	410	410	6.5	98	140	190	---	---	6/9/2011	3	3	3	3	3	3	3	3	10	3	3
Xylenes	16,000	410,000	41,000	320	320	5.6	63	100	150	---	5.6	6/9/2011	3	3	3	3	3	3	3	3	10	3	3
<b><i>PNA Constituents (mg/kg)</i></b>																							
Acenaphthene	4,700	120,000	120,000	---	---	---	---	---	570	0.13	4,700	6/9/2011	3	3	3	3	3	3	3	3	10	3	3
Acenaphthylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	85 <sup>(4)</sup>	0.07	2,300	6/9/2011	3	3	3	3	3	3	3	3	10	3	3
Anthracene	23,000	610,000	610,000	---	---	---	---	---	12,000	0.4	---	6/9/2011	3	3	3	3	3	3	3	3	10	3	3
Benzo(a)anthracene	0.90	8	170	---	---	---	---	---	2	1.8	2	6/9/2011	3	3	3	3	3	3	3	3	10	3	3
Benzo(a)pyrene	0.09	0.80	17	---	---	---	---	---	8	2.1	2.1	6/9/2011	3	3	3	3	3	3	3	3	10	3	3
Benzo(b)fluoranthene	0.90	8	170	---	---	---	---	---	5	2.1	2.1	6/9/2011	3	3	3	3	3	3	3	3	10	3	3
Benzo(g,h,i)perylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	27,000 <sup>(4)</sup>	1.7	---	6/9/2011	3	3	3	3	3	3	3	3	10	3	3
Benzo(k)fluoranthene	9	78	1,700	---	---	---	---	---	49	1.7	9	6/9/2011	3	3	3	3	3	3	3	3	10	3	3
Bis(2-ethylhexyl)phthalate	46	410	4,100	31,000	31,000	31,000	---	---	3,600	---	---	6/9/2011	3	3	3	3	3	3	3	3	10	3	3
Chrysene	88	780	17,000	---	---	---	---	---	160	2.7	88	6/9/2011	3	3	3	3	3	3	3	3	10	3	3
Dibenzo(a,h)anthracene	0.09	0.80	17	---	---	---	---	---	2	0.42	0.42	6/9/2011	3	3	3	3	3	3	3	3	10	3	3
Fluoranthene	3,100	82,000	82,000	---	---	---	---	---	4,300	4.1	---	6/9/2011	3	3	3	3	3	3	3	3	10	3	3
Fluorene	3,100	82,000	82,000	---	---	---	---	---	560	0.18	3,100	6/9/2011	3	3	3	3	3	3	3	3	10	3	3
Indeno(1,2,3-cd)pyrene	0.90	8.00	170	---	---	---	---	---	14	1.6	1.6	6/9/2011	3	3	3	3	3	3	3	3	10	3	3
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	0.2	1.8	6/9/2011	3	3	3	3	3	3	3	3	10	3	3
Phenanthrene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	200 <sup>(4)</sup>	2.5	2,300	6/9/2011	3	3	3	3	3	3	3	3	10	3	3
Pyrene	2,300	61,000	61,000	---	---	---	---	---	4,200	3	---	6/9/2011	3	3	3	3	3	3	3	3	10	3	3

Notes:

<sup>(1)</sup> Objective is for m-xylene

<sup>(2)</sup> Objective is for p-xylene

<sup>(3)</sup> Objectives are for Class I groundwater.

<sup>(4)</sup> Non-TACO or provisional ROs provided by the IEPA.

<sup>(b)</sup> Soil sample PA4-01 (3) is a soil sample location along the western remediation site boundary near 5th Street.

<sup>(b)</sup> Soil sample PA4-01 (3) is a soil sample location along the northern remediation site boundary near the railroad tracks.

--- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.

Concentration exceeds one or more project remediation objective.

Table 5-9  
Perimeter Soil Sample Analytical Results - BTEX and PNAs  
Champaign Former MGP  
Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component to Groundwater <sup>(3)</sup>	IEPA Accepted Background Levels for MSA	Project Remediation Objectives	Sample Location: Sample ID: Sample Date: Sample Depth (feet):	PA4-02	PA4-03	PA4-04	PA4-06	PA5-3	PA5-08	PA5-09	PA5-10	PA5-11	PA5-12
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial					PA4-02 (3)	PA4-03 (3)	PA4-04 (3)	PA4-06 (3)	PA5-3 (3)	PA5-08 (3)	PA5-09 (3)	PA5-10 (3)	PA5-11 (3)	PA5-12 (3)
<b>BTEX Constituents (mg/kg)</b>																						
Benzene	12	100	2,300	0.8	1.6	2.2	0.069	0.51	0.03	---	0.069		1.2	4.9	32.2	0.604	<0.0014	4.14	<1.85	2.55	1.84	6.86
Ethylbenzene	7,800	200,000	20,000	400	400	58	130	130	13	---	58		1.3	5.1	5.2	<1.51	<0.007	32.2	8.1	4.1	1.57	2.09
Toluene	16,000	410,000	410,000	650	650	42	240	240	12	---	42		<3.33	4	8.3	0.85	<0.008	---	---	---	1.12	6.28
m,p-Xylenes	16,000	410,000	41,000	420 <sup>(1)</sup>	420 <sup>(1)</sup>	5.9 <sup>(2)</sup>	75 <sup>(2)</sup>	120 <sup>(2)</sup>	200 <sup>(2)</sup>	---	---		---	---	---	---	<0.009	---	---	---	0.837	3.35
o-Xylene	16,000	410,000	41,000	410	410	6.5	98	140	190	---	---		---	---	---	---	<0.010	---	---	---	0.38	1.3
Xylenes	16,000	410,000	41,000	320	320	5.6	63	100	150	---	5.6		3.57	25.8	23	1.1	<0.007	25.3	5.3	4.1	1.217	4.65
<b>PNA Constituents (mg/kg)</b>																						
Acenaphthene	4,700	120,000	120,000	---	---	---	---	---	570	0.13	4,700		20.1	12.6	30.3	<13.6	<0.11	65.7	80.3	49.1	100	442
Acenaphthylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	85 <sup>(4)</sup>	0.07	2,300		1.91	<0.261	8.15	37.2	3.35	8.78	8.01	7.51	34.2	129
Anthracene	23,000	610,000	610,000	---	---	---	---	---	12,000	0.4	---		16.9	12.4	58.6	19.2	0.487	40	46.5	26.6	53.4	337
Benzo(a)anthracene	0.90	8	170	---	---	---	---	---	2	1.8	2		10.9	7.7	74.2	48.4	0.746	22.2	25.8	28.7	60.5	280
Benzo(a)pyrene	0.09	0.80	17	---	---	---	---	---	8	2.1	2.1		7.18	4.35	69.7	83.8	4.08	19.5	20.6	29.6	73.3	303
Benzo(b)fluoranthene	0.90	8	170	---	---	---	---	---	5	2.1	2.1		9.08	5.17	84	184	3.12	15.7	16.5	27.8	70.4	302
Benzo(g,h,i)perylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	27,000 <sup>(4)</sup>	1.7	---		2.1	1.56	31.2	93.3	3	9.19	6.79	12.2	52	146
Benzo(k)fluoranthene	9	78	1,700	---	---	---	---	---	49	1.7	9		3.09	2.03	34.3	78.7	0.973	5.28	5.96	9.04	26.8	111
Bis(2-ethylhexyl)phthalate	46	410	4,100	31,000	31,000	31,000	---	---	3,600	---	---		<5.12	<5.15	<54.1	<269	<2.17	<6.89	<6.62	<6.54	<52.8	<161
Chrysene	88	780	17,000	---	---	---	---	---	160	2.7	88		11	6.89	70.3	39	1.2	20.9	24.4	28.1	61.2	281
Dibenzo(a,h)anthracene	0.09	0.80	17	---	---	---	---	---	2	0.42	0.42		0.772	0.443	8.2	31.9	0.476	2.57	1.91	3.32	8.41	32.9
Fluoranthene	3,100	82,000	82,000	---	---	---	---	---	4,300	4.1	---		37.6	22.7	187	59.8	0.584	46.2	55.7	58.9	117	625
Fluorene	3,100	82,000	82,000	---	---	---	---	---	560	0.18	3,100		25.3	17	47.3	<13.6	0.324	41.8	51.3	29.1	59.9	324
Indeno(1,2,3-cd)pyrene	0.90	8.00	170	---	---	---	---	---	14	1.6	1.6		2.31	1.69	29.8	104	2.54	7.58	6.03	10.9	42.8	119
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	0.2	1.8		5.97	8.56	22.3	18.6	0.357	25.2	32.1	19.2	56.8	768
Phenanthrene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	200 <sup>(4)</sup>	2.5	2,300		37.1	23.3	151	28.3	0.216	78.4	143	75.4	144	969
Pyrene	2,300	61,000	61,000	---	---	---	---	---	4,200	3	---		33	19.7	155	73.1	1.83	67.4	78.5	81.7	173	726

Notes:

- <sup>(1)</sup> Objective is for m-xylene
- <sup>(2)</sup> Objective is for p-xylene
- <sup>(3)</sup> Objectives are for Class I groundwater.
- <sup>(4)</sup> Non-TACO or provisional ROs provided by the IEPA.
- <sup>(5)</sup> Soil sample PA4-01 (3) is a soil sample location along the western remediation site boundary near 5th Street.
- <sup>(6)</sup> Soil sample PA4-01 (3) is a soil sample location along the northern remediation site boundary near the railroad tracks.
- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.
- Concentration exceeds one or more project remediation objective.

Table 5-9  
 Perimeter Soil Sample Analytical Results - BTEX and PNAs  
 Champaign Former MGP  
 Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component to Groundwater <sup>(3)</sup>	IEPA Accepted Background Levels for MSA	Project Remediation Objectives	Sample Location:	PA5-13	PA5-14	PA6-2	PA6-3
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial				Sample ID:	PA5-13 (3)	PA5-14 (3)	PA6-2 (3)	PA6-3 (3)
												Sample Date:	8/18/2011	8/18/2011	8/9/2011	8/9/2011
												Sample Depth (feet):	3	3	3	3
<b><i>BTEX Constituents (mg/kg)</i></b>																
Benzene	12	100	2,300	0.8	1.6	2.2	0.069	0.51	0.03	---	0.069		32.6	<0.0167	---	---
Ethylbenzene	7,800	200,000	20,000	400	400	58	130	130	13	---	58		15	<0.0833	---	---
Toluene	16,000	410,000	410,000	650	650	42	240	240	12	---	42		12.7	0.028	---	---
m,p-Xylenes	16,000	410,000	41,000	420 <sup>(1)</sup>	420 <sup>(1)</sup>	5.9 <sup>(2)</sup>	75 <sup>(2)</sup>	120 <sup>(2)</sup>	200 <sup>(2)</sup>	---	---		10.2	0.022	---	---
o-Xylene	16,000	410,000	41,000	410	410	6.5	98	140	190	---	---		7.65	<0.0833	---	---
Xylenes	16,000	410,000	41,000	320	320	5.6	63	100	150	---	5.6		17.85	0.022	---	---
<b><i>PNA Constituents (mg/kg)</i></b>																
Acenaphthene	4,700	120,000	120,000	---	---	---	---	---	570	0.13	4,700		625	<1.16	<0.114	1.07
Acenaphthylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	85 <sup>(4)</sup>	0.07	2,300		74.6	7.71	4.57	20.9
Anthracene	23,000	610,000	610,000	---	---	---	---	---	12,000	0.4	---		328	1.93	0.447	8.43
Benzo(a)anthracene	0.90	8	170	---	---	---	---	---	2	1.8	2		230	10.8	0.916	20.9
Benzo(a)pyrene	0.09	0.80	17	---	---	---	---	---	8	2.1	2.1		209	27	5.67	49.9
Benzo(b)fluoranthene	0.90	8	170	---	---	---	---	---	5	2.1	2.1		212	24.6	4.17	49.2
Benzo(g,h,i)perylene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	27,000 <sup>(4)</sup>	1.7	---		91.8	23.4	4.75	28.3
Benzo(k)fluoranthene	9	78	1,700	---	---	---	---	---	49	1.7	9		81.2	8.84	1.13	14.4
Bis(2-ethylhexyl)phthalate	46	410	4,100	31,000	31,000	31,000	---	---	3,600	---	---		<133	<22.8	<2.25	<9.74
Chrysene	88	780	17,000	---	---	---	---	---	160	2.7	88		226	12.6	1.69	26.8
Dibenzo(a,h)anthracene	0.09	0.80	17	---	---	---	---	---	2	0.42	0.42		21.8	3.63	0.805	5.62
Fluoranthene	3,100	82,000	82,000	---	---	---	---	---	4,300	4.1	---		515	13.3	1.08	42.7
Fluorene	3,100	82,000	82,000	---	---	---	---	---	560	0.18	3,100		382	<1.16	0.425	4.6
Indeno(1,2,3-cd)pyrene	0.90	8.00	170	---	---	---	---	---	14	1.6	1.6		75.9	15.8	3.32	24.4
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	0.2	1.8		670	1.59	<0.114	2.42
Phenanthrene	2,300 <sup>(4)</sup>	61,000 <sup>(4)</sup>	61,000 <sup>(4)</sup>	---	---	---	---	---	200 <sup>(4)</sup>	2.5	2,300		914	2.49	<0.114	30.5
Pyrene	2,300	61,000	61,000	---	---	---	---	---	4,200	3	---		639	22.7	3.16	49.1

Notes:

- <sup>(1)</sup> Objective is for m-xylene
- <sup>(2)</sup> Objective is for p-xylene
- <sup>(3)</sup> Objectives are for Class I groundwater.
- <sup>(4)</sup> Non-TACO or provisional ROs provided by the IEPA.
- <sup>(5)</sup> Soil sample PA4-01 (3) is a soil sample location along the western remediation site boundary near 5th Street.
- <sup>(6)</sup> Soil sample PA4-01 (3) is a soil sample location along the northern remediation site boundary near the railroad tracks.
- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.
- Concentration exceeds one or more project remediation objective.





TABLE 5-10  
Perimeter Soil Sample Analytical Results - VOCs  
Champaign Former MGP  
Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component to Groundwater <sup>(1)</sup>	Project Remediation Objectives	Sample Location: Sample ID: Sample Date: Sample Depth (feet):	PA1-Wall	PA2-01A-F	PA5-5	PA5-6	PA5-11	PA5-12	PA5-13
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial				PA1-Wall (3)	PA2-01A (10)	PA5-5(3)	PA5-6(3)	PA5-11(3)	PA5-12(3)	PA5-13(3)
Hexachloroethane	78	2,000	2,000	---	---	---	160	160	0.5	---	8/16/2011	<0.27	<0.0515	<0.177	<0.162	<0.077	<1.77	<2.5
Iodomethane	---	---	---	---	---	---	---	---	---	---	10	<0.539	<0.103	<0.355	<0.324	<0.154	<3.55	<0.1
Isopropylbenzene (cumene)	7,800 <sup>(2)</sup>	200,000 <sup>(2)</sup>	61,000 <sup>(2)</sup>	500 <sup>(2)</sup>	790 <sup>(2)</sup>	51 <sup>(2)</sup>	21	130	91 <sup>(2)</sup>	---	3	0.1	0.027	<0.177	<0.162	0.0853	<1.77	<2.5
Methacrylonitrile	---	---	---	---	---	---	---	---	---	---	3	<2.7	<0.515	<1.77	<1.62	<0.77	<17.7	<2.5
Methyl Methacrylate	---	---	---	---	---	---	---	---	---	---	3	<0.27	<0.0515	<0.177	<0.162	<0.077	<1.77	<2.5
Methyl tert-butyl ether	780	20,000	2,000	8,800	8,800	140	2,900	6,300	0.32	---	3	<0.108	<0.0206	<0.0709	<0.0648	<0.0308	<0.71	<1
Methylacrylate	2,300 <sup>(2)</sup>	61,000 <sup>(2)</sup>	6,100 <sup>(2)</sup>	6,500 <sup>(2)</sup>	6,500 <sup>(2)</sup>	6,500 <sup>(2)</sup>	---	---	0.89 <sup>(2)</sup>	---	3	<0.539	<0.103	<0.355	<0.324	<0.154	<3.55	<5.01
Methylene chloride (dichloromethane)	85	760	12,000	13	24	34	1.4	10	0.02	1.4	3	0.12	0.037	0.055	0.034	0.054	<1.77	<2.5
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	12	1.8	3	0.24	<0.103	<0.355	<0.324	2.43	84.9	127
n-Butylbenzene	---	---	---	---	---	---	---	---	---	---	3	<0.27	0.023	<0.177	<0.162	0.0902	0.61	6.71
n-Hexane	---	---	---	290 <sup>(2)</sup>	290 <sup>(2)</sup>	15 <sup>(2)</sup>	---	---	---	---	3	<1.08	<0.206	<0.709	<0.648	0.047	<7.1	<10
Nitrobenzene	39	1,000	1,000	92	140	9.4	140	380	0.1	---	3	<5.39	<1.03	<3.55	<3.24	<1.54	<35.5	<50.1
n-Propylbenzene	---	---	---	---	---	---	---	---	---	---	3	<0.27	<0.0515	<0.177	<0.162	0.116	<1.77	<2.5
Pentachloroethane	---	---	---	---	---	---	---	---	---	---	3	<0.27	<0.0515	<0.177	<0.162	<0.077	<1.77	<2.5
p-Isopropyltoluene	---	---	---	---	---	---	---	---	---	---	3	<0.27	<0.0515	<0.177	<0.162	0.069	<1.77	<2.5
Propionitrile	---	---	---	---	---	---	---	---	---	---	3	<2.7	<0.515	<1.77	<1.62	<0.77	<17.7	<2.5
sec-Butylbenzene	---	---	---	---	---	---	---	---	---	---	3	<0.27	<0.0515	<0.177	<0.162	<0.077	<1.77	5.1
Styrene	16,000	410,000	41,000	1,500	1,500	430	230	230	4	230	3	<0.27	<0.0515	<0.177	<0.162	<0.077	<1.77	<2.5
tert-Butylbenzene	---	---	---	---	---	---	---	---	---	---	3	<0.27	<0.0515	<0.177	<0.162	<0.077	<1.77	<2.5
Tetrachloroethene	12	110	2,400	11	20	28	0.24	1.7	0.06	---	3	<0.27	<0.0515	<0.177	<0.162	<0.077	<1.77	<2.5
Tetrahydrofuran	---	---	---	---	---	---	---	---	---	---	3	<2.7	<0.515	<1.77	<1.62	<0.77	<17.7	<2.5
trans-1,2-Dichloroethene	1,600	41,000	41,000	3,100	3,100	3,100	---	---	0.7	---	3	<0.27	<0.0515	<0.177	<0.162	<0.077	<1.77	<2.5
trans-1,3-Dichloropropene	6.4	57	1,200	1.1	2.1	0.39	---	---	0.004	---	3	<0.216	<0.0412	<0.142	<0.13	<0.0616	<1.42	<2
Trichloroethene	58	520	1,200	5	8.9	12	0.26	1.9	0.06	---	3	<0.27	<0.0515	<0.177	<0.162	<0.077	<1.77	<2.5
Trichlorofluoromethane	23,000 <sup>(2)</sup>	610,000 <sup>(2)</sup>	140,000 <sup>(2)</sup>	850 <sup>(2)</sup>	1,400 <sup>(2)</sup>	88 <sup>(2)</sup>	31	190	34 <sup>(2)</sup>	---	3	<0.27	<0.0515	<0.177	<0.162	<0.077	<1.77	<2.5
Vinyl acetate	78,000	1,000,000	200,000	1,000	1,600	10	270	1,600	170 <sup>(2)</sup>	---	3	<2.7	<0.515	<1.77	<1.62	<0.77	<17.7	<2.5
Vinyl chloride	0.46	7.9	170	0.28	1.1	1.1	0.011	0.15	0.01	---	3	<0.108	<0.0206	<0.0709	<0.0648	<0.0308	<0.71	<1

Notes:

<sup>(1)</sup> Objectives are for Class I Groundwater.

<sup>(2)</sup> Non-TACO or provisional RODs provided by the IEPA.

--- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.

Concentration exceeds one or more project remediation objective.

TABLE 5-11  
Perimeter Soil Sample Analytical Results - SVOCs  
Champaign Former MGP  
Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component to Groundwater <sup>(1)</sup>	Project Remediation Objectives	Sample Location: PA4-00 PA4-02 PA4-03 PA4-04 PA5-08 PA5-09 PA5-11 PA5-12 PA5-13 Sample ID: PA4-00 (10) PA4-02 (3) PA4-03 (3) PA4-04 (3) PA5-08 (3) PA5-09 (3) PA5-11 (3) PA5-12 (3) PA5-13 (3) Sample Date: 8/23/2011 8/18/2011 8/17/2011 8/17/2011 8/23/2011 8/22/2011 8/19/2011 8/19/2011 8/18/2011 Sample Depth (feet): 10 3 3 3 3 3 3 3 3	PA4-00	PA4-02	PA4-03	PA4-04	PA5-08	PA5-09	PA5-11	PA5-12	PA5-13
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial				PA4-00	PA4-02	PA4-03	PA4-04	PA5-08	PA5-09	PA5-11	PA5-12	PA5-13
<b>Semivolatile Organic Compounds (mg/kg)</b>																				
1,2,4-Trichlorobenzene	780	20,000	2,000	3,200	3,200	920	220	980	5	--	--	<3.82	<3.84	<40.3	--	--	--	--	--	
1,2-Dichlorobenzene	7,000	180,000	18,000	560	560	310	200	200	17	--	--	<3.82	<3.84	<40.3	--	--	--	--	--	
1,2-Diphenylhydrazine	--	--	--	--	--	--	--	--	--	--	--	<6.42	<6.46	<67.8	--	--	--	--	--	
1,3-Dichlorobenzene	--	--	--	--	--	--	--	--	--	--	--	<3.82	<3.84	<40.3	--	--	--	--	--	
1,4-Dichlorobenzene	--	--	--	11,000	17,000	340	1.3	9.8	2	--	--	<3.82	<3.84	<40.3	--	--	--	--	--	
2,4,5-Trichlorophenol	7,800	200,000	200,000	200	--	--	--	--	130	--	--	<2.67	<2.69	<28.2	--	--	--	--	--	
2,4,6-Trichlorophenol	58	520	11,000	200	390	540	--	--	0.09	--	--	<2.67	<2.69	<28.2	--	--	--	--	--	
2,4-Dichlorophenol	230	6,100	610	--	--	--	--	--	0.86	--	--	<3.82	<3.84	<40.3	--	--	--	--	--	
2,4-Dimethylphenol	1,600	41,000	41,000	--	--	--	--	--	9	--	--	<3.82	<3.84	<40.3	--	--	--	--	--	
2,4-Dinitrophenol	160	4,100	410	--	--	--	--	--	0.2	--	--	<7.64	<7.69	<80.7	--	--	--	--	--	
2,4-Dinitrotoluene	0.9	8.4	180	--	--	--	--	--	0.0008	--	--	<2.67	<2.69	<28.2	--	--	--	--	--	
2,6-Dinitrotoluene	0.9	8.4	180	--	--	--	--	--	0.0007	--	--	<2.67	<2.69	<28.2	--	--	--	--	--	
2-Chloronaphthalene (beta-chloronaphthalene)	6,300 <sup>(2)</sup>	160,000 <sup>(2)</sup>	160,000 <sup>(2)</sup>	--	--	--	--	--	49 <sup>(2)</sup>	--	--	<2.67	<2.69	<28.2	--	--	--	--	--	
2-Chlorophenol	390	10,000	10,000	53,000	53,000	53,000	49,000	49,000	4	--	--	<3.82	<3.84	<40.3	--	--	--	--	--	
2-Methoxy-4-methylphenol	--	--	--	--	--	--	--	--	--	--	--	<4.97	<5	<52.4	--	--	--	--	--	
2-Methylnaphthalene	310 <sup>(2)</sup>	8,200 <sup>(2)</sup>	820 <sup>(2)</sup>	--	--	--	83	83	7.2 <sup>(2)</sup>	83	10.4	3.02	4.7	6.45	12.1	20.7	15.8	357	293	
2-Nitroaniline	230 <sup>(2)</sup>	6,100 <sup>(2)</sup>	610 <sup>(2)</sup>	35 <sup>(2)</sup>	56 <sup>(2)</sup>	3.6 <sup>(2)</sup>	--	--	0.14 <sup>(2)</sup>	--	--	<7.64	<7.69	<80.7	--	--	--	--	--	
2-Nitrophenol	--	--	--	--	--	--	--	--	--	--	--	<2.67	<2.69	<28.2	--	--	--	--	--	
3,3'-Dichlorobenzidine	1	13	280	--	--	--	--	--	0.007	--	--	<2.67	<2.69	<28.2	--	--	--	--	--	
3-Nitroaniline	23 <sup>(2)</sup>	610 <sup>(2)</sup>	61 <sup>(2)</sup>	250 <sup>(2)</sup>	400 <sup>(2)</sup>	26 <sup>(2)</sup>	--	--	0.01 <sup>(2)</sup>	--	--	<7.64	<7.69	<80.7	--	--	--	--	--	
4,6-Dinitro-2-methylphenol	7.8	200	820	--	--	--	--	--	0.0031	--	--	<7.64	<7.69	<80.7	--	--	--	--	--	
4-Bromophenyl phenyl ether	--	--	--	--	--	--	--	--	--	--	--	<2.67	<2.69	<28.2	--	--	--	--	--	
4-Chloro-3-methylphenol	--	--	--	--	--	--	--	--	--	--	--	<3.82	<3.84	<40.3	--	--	--	--	--	
4-Chloroaniline (p-chloroaniline)	310	8,200	820	--	--	--	--	--	0.7	--	--	<3.82	<3.84	<40.3	--	--	--	--	--	
4-Chlorophenyl phenyl ether	--	--	--	--	--	--	--	--	--	--	--	<2.67	<2.69	<28.2	--	--	--	--	--	
4-Nitroaniline (p-nitroaniline)	230 <sup>(2)</sup>	6,100 <sup>(2)</sup>	610 <sup>(2)</sup>	1,000 <sup>(2)</sup>	1,600 <sup>(2)</sup>	110 <sup>(2)</sup>	--	--	0.1 <sup>(2)</sup>	--	--	<3.82	<3.84	<40.3	--	--	--	--	--	
4-Nitrophenol	630 <sup>(2)</sup>	16,000 <sup>(2)</sup>	16,000 <sup>(2)</sup>	--	--	--	--	--	0.24 <sup>(2)</sup>	--	--	<2.67	<2.69	<28.2	--	--	--	--	--	
Aniline	110 <sup>(2)</sup>	1,000 <sup>(2)</sup>	1,400 <sup>(2)</sup>	81 <sup>(2)</sup>	130 <sup>(2)</sup>	8.4 <sup>(2)</sup>	--	--	0.063 <sup>(2)</sup>	--	--	<3.82	<3.84	<40.3	--	--	--	--	--	
Azobenzene	--	--	--	--	--	--	--	--	--	--	--	<2.67	<2.69	<28.2	--	--	--	--	--	
Benzoic acid	310,000	1,000,000	820,000	--	--	--	--	--	400	--	--	<11.5	<11.5	<121	--	--	--	--	--	
Benzyl alcohol	39,000	1,000,000	200,000	6,100	6,100	6,100	--	--	15	--	--	<3.82	<3.84	<40.3	--	--	--	--	--	
Bis(2-chloroethoxy)methane	--	--	--	--	--	--	--	--	--	--	--	<2.67	<2.69	<28.2	--	--	--	--	--	
Bis(2-chloroethyl)ether	0.6	5	75	0.2	0.47	0.66	0.5	3.7	0.0004	--	--	<3.82	<3.84	<40.3	--	--	--	--	--	
Bis(2-chloroisopropyl)ether	3,100 <sup>(2)</sup>	82,000 <sup>(2)</sup>	8,200 <sup>(2)</sup>	1,300 <sup>(2)</sup>	1,300 <sup>(2)</sup>	1,300 <sup>(2)</sup>	--	--	2.4 <sup>(2)</sup>	--	--	<2.67	<2.69	<28.2	--	--	--	--	--	
Butyl benzyl phthalate	16,000	410,000	410,000	930	930	930	--	--	930	--	--	<2.67	<2.69	<28.2	--	--	--	--	--	
Carbazole	32	290	6,200	--	--	--	--	--	0.6	--	--	<3.82	<3.84	12	--	--	--	--	--	
Dibenzofuran	160 <sup>(2)</sup>	4,100 <sup>(2)</sup>	4,100 <sup>(2)</sup>	--	--	--	--	--	6.1 <sup>(2)</sup>	310	11.8	7.79	33.6	--	--	<69	66	53	--	
Diethyl phthalate	63,000	1,000,000	1,000,000	2,000	2,000	2,000	--	--	470	--	--	<3.82	<3.84	<40.3	--	--	--	--	--	
Dimethyl phthalate	--	--	--	--	--	--	--	--	--	--	--	<2.67	<2.69	<28.2	--	--	--	--	--	
Di-n-butyl phthalate	7,800	200,000	200,000	2,300	2,300	2,300	--	--	2,300	--	--	<2.67	<2.69	<28.2	--	--	--	--	--	
Di-n-octyl phthalate	1,600	41,000	4,100	10,000	10,000	10,000	--	--	10,000	--	--	<2.67	<2.69	<28.2	--	--	--	--	--	
Hexachlorobenzene	0.4	4	78	1	1.8	2.6	0.25	0.25	2	--	--	<2.67	<2.69	<28.2	--	--	--	--	--	
Hexachlorobutadiene	--	--	--	--	--	--	--	--	--	--	--	<3.82	<3.84	<40.3	--	--	--	--	--	
Hexachlorocyclopentadiene	550	14,000	14,000	10	16	1.1	5	30	400	--	--	<2.67	<2.69	<28.2	--	--	--	--	--	
Hexachloroethane	78	2,000	2,000	--	--	--	160	160	0.5	--	--	<3.82	<3.84	<40.3	--	--	--	--	--	
Isophorone	15,600	410,000	410,000	4,600	4,600	4,600	1,800	1,800	8	--	--	<2.67	<2.69	<28.2	--	--	--	--	--	
m,p-Cresol	390 <sup>(2)</sup>	10,000 <sup>(2)</sup>	1,000 <sup>(2)</sup>	8,100 <sup>(2)</sup>	8,100 <sup>(2)</sup>	8,100 <sup>(2)</sup>	--	--	0.2 <sup>(2)</sup>	--	--	<3.82	<3.84	<40.3	--	--	--	--	--	
Nitrobenzene	39	1,000	1,000	92	140	9.4	140	380	0.1	--	--	<3.82	<3.84	<40.3	--	--	--	--	--	
N-Nitrosodimethylamine	0.013	0.11	1.6	0.012	0.023	0.032	--	--	0.000067	--	--	<3.82	<3.84	<40.3	--	--	--	--	--	
N-Nitroso-di-n-propylamine	0.09	0.8	18	--	--	--	--	--	0.00005	--	--	<3.82	<3.84	<40.3	--	--	--	--	--	
N-Nitrosodiphenylamine	130	1,200	25,000	--	--	--	--	--	1	--	--	<3.82	<3.84	<40.3	--	--	--	--	--	
o-Cresol	3,900	100,000	100,000	--	--	--	4,800	4,800	15	--	--	<3.82	<3.84	<40.3	--	--	--	--	--	
Pentachlorophenol	3	24	520	--	--	--	--	--	0.03	--	--	<15.3	<15.4	<161	--	--	--	--	--	
Phenol	23,000	610,000	61,000	--	--	--	12,000	12,000	100	--	--	<2.67	<2.69	<28.2	--	--	--	--	--	
Pyridine	78 <sup>(2)</sup>	2,000 <sup>(2)</sup>	2,000 <sup>(2)</sup>	200,000 <sup>(2)</sup>	200,000 <sup>(2)</sup>	200,000 <sup>(2)</sup>	--	--	0.032 <sup>(2)</sup>	--	--	<3.82	<3.84	<40.3	--	--	--	--	--	

Notes:

- <sup>(1)</sup> Objectives are for Class I Groundwater.
- <sup>(2)</sup> Non-TACO or provisional ROs provided by the IEPA.
- <sup>(3)</sup> Objective is for p-cresol.
- <sup>(4)</sup> Objective is for m-cresol.

-- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.

Concentration exceeds one or more project remediation objective.

\*Note: Hatched columns represent areas that have been removed during remediation.

TABLE 5-12  
 Perimeter Soil Sample Analytical Results - Inorganics  
 Champaign Former MGP  
 Ameren Illinois

Constituent	Soil Ingestion			Soil Inhalation			Indoor Air		Soil Component to Groundwater <sup>(1)</sup>	IEPA Accepted Background Levels for non-MSA	Project Remediation Objective	Location:	PA1-02	PA1-03	PA1-04	PA1-Wall	PA2-01B	PA5-11	PA5-12	PA5-14	PA6-3
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial				Sample ID:	PA1-02 (3)	PA1-03 (3)	PA1-04 (3)	PA1-Wall (3)	PA2-01B (3)	PA5-11 (3)	PA5-12 (3)	PA5-14 (3)	PA6-3(3)
												Sample Date:	6/9/2011	6/9/2011	6/9/2011	8/16/2011	8/3/2011	8/19/2011	8/19/2011	8/18/2011	8/9/2011
												Depth (feet):	3	3	3	3	3	3	3	3	3
<b>Metals (mg/kg)</b>																					
Mercury	23	610	61	10	16	0.10	0.45	0.45	6.4	0.06	0.1		0.105	0.105	0.186	0.027	8.47	0.129	0.414	0.27	---
Selenium	390	10,000	1,000	---	---	---	---	---	3.3	0.48	---		0.604	0.56	0.41	<0.577	<0.588	<0.556	2	1.71	0.46
Arsenic	13.0	13.0	61.0	750	1,200	25,000	---	---	30	13	13		10.8	16.2	9.66	14	7.02	---	---	---	40.3
Barium	5,500	140,000	14,000	690,000	910,000	870,000	---	---	1,800	110	---		84.9	108	136	194	154	---	---	---	---
Cadmium	78	2,000	200	1,800	2,800	59,000	---	---	59	0.6	---		0.69	1.26	0.21	0.45	1.16	---	---	---	---
Chromium	230	6,100	4,100	270	420	690	---	---	32	16.2	230		16.2	19.7	22	21.1	18.7	---	---	---	---
Lead	400	800	700	---	---	---	---	---	107	36	400		41.3	54.2	55.9	15.3	89.9	---	---	---	---
Silver	390	10,000	1,000	---	---	---	---	---	39	0.55	---		<0.51	<0.51	<0.55	<0.55	<0.55	---	---	---	---
Cyanide (Amenable)	1,600	41,000	4,100	---	---	---	---	---	40	0.51	1,600		17	9.22	1.8	---	<3.38	---	---	---	---
Cyanide (Total)													39.8	13.5	5.35	2.51	22.6	---	---	---	---

Notes:  
<sup>(1)</sup> Objectives are for Class I Groundwater.  
 --- No objective has been published for this constituent by the IEPA, or the sample was not analyzed for this constituent.  
 Concentration exceeds one or more project remediation objective.

Table 5-13  
 Evaluation for Soil Attenuation  
 Champaign Former MGP  
 Ameren Illinois

Sample Identification	Total Organic Compounds Using 50% of Detection Limit <sup>(1)</sup> (mg/kg)	Total Petroleum Hydrocarbons <sup>(2)</sup> (mg/kg)	Site-Specific Soil $f_{oc}$ <sup>(3)</sup> (mg/kg)
P1-F5-F(20)	746.78	---	10,400
P1-H5-F(20.5)	752.03	---	10,400
P1-H3.5-F(20)	472.96	---	10,400
P1-F2-F(21)	747.64	---	10,400
P1-H1-F (20)	70.87	---	10,400
P1-F3.5-F(20.5)	1,586.11	---	10,400
P1-D5-F(25)	746.59	---	10,400
P1-D3.5-F(25)	898.74	---	10,400
P1-C5-F(22)	18.66	---	10,400
P1-B5-F (25)	47.92	---	10,400
P1-B3.5-F (26)	51.54	---	10,400
P1-B3.5-F (24)	95.97	---	10,400
P1-B2-F (28)	199.48	---	10,400
P1-B2-F (26)	590.84	---	10,400
P1-B2-F (24-25)	762.99	---	10,400
P1-B2-F (22)	1,306.44	---	10,400
P2-B1.5-F(22)	18.44	---	10,400
P2-B2.5-F(22)	526.98	---	10,400
P2-B4-F(22)	966.42	28.97	10,400
P2-C4-F(22)	1036.04	333.70	10,400
P2-D2-F(22)	8842.31	1509.90	10,400
P2-D4-F(22)	16911.42	3359.00	10,400
P2-H1.5-F (24)	28.33	11.18	10,400
P2-H3.5-F (24)	74.27	10.68	10,400
P2-FG-1.5-F (28)	213.88	10.96	10,400
P2-FG-3.5-F (24)	150.85	24.00	10,400
P2-GH-F(17)	151.03	60.80	10,400
P2-E2.5-F (24)	1057.87	27.19	10,400
P2-E4-F (24)	1297.42	28.53	10,400
P2-E4-F (30)	29.21	11.14	10,400
P3-B2-F(22)	618.24	47.44	10,400
P3-B2-F(24)	29.32	11.04	10,400
P3-B4-F(22)	28.81	11.08	10,400
P3-B4-F(24)	28.78	11.10	10,400

Notes:

- Not measured.
- (1) Total Organic Compounds is the sum of the detected compounds and 50% of the detection limit for non-detected compounds for PNAs (8270 SIMS), SVOCs (8270), and VOCs (8260).
- (2) Total Petroleum Hydrocarbons (OA-2) by 3550B, 8015B for diesel, kerosene, mineral spirits, and motor oil and 50% of the detection limit for non-detected compounds.
- (3) The foc value for the 0 to 3 foot depth interval was obtained from soil boring B-817 at 2' - 3' bgs. The foc value for the greater than 10 foot depth interval was obtained from soil boring B-851 from 19' - 20' bgs.

Exceeds Site-Specific foc.

Table 5-13  
 Evaluation for Soil Attenuation  
 Champaign Former MGP  
 Ameren Illinois

Sample Identification	Total Organic Compounds Using 50% of Detection Limit <sup>(1)</sup> (mg/kg)	Total Petroleum Hydrocarbons <sup>(2)</sup> (mg/kg)	Site-Specific Soil $f_{oc}$ <sup>(3)</sup> (mg/kg)
P3-C3-F(22)	946.90	44.32	10,400
P3-D2-F(22)	5321.48	1467.00	10,400
P3-C2-F(24)	474.01	200.62	10,400
P3-D2-F(24)	381.63	35.96	10,400
P3-C3-F(24)	80.26	22.55	10,400
P3-E3-F(24)	2494.33	682.50	10,400
P3-E3-F(25)	154.91	33.21	10,400
P3-DE1.5-F(23)	2271.16	52.91	10,400
P3-DE1-F(23)	1759.44	103.47	10,400
P3-F2-F(23)	29.21	648.60	10,400
P3-F2-F(25)	241.39	41.95	10,400
P3-H.1.5-F(23)	110.65	32.20	10,400
P4-B2-F(23)	1898.64	11.08	10,400
P4-B3-F(23)	603.97	11.30	10,400
P4-BC4-F(23)	52.67	31.82	10,400
P4-B2-F(25)	10,009.40	18.74	10,400
P4-B3-F(25)	1068.51	485.80	10,400
P4-BC4-F(25)	44.48	18.71	10,400
P4-D1.5-F (25)	28.26	10.88	10,400
P4-D3-F (25)	36.03	18.37	10,400
P4-D4.5-F (25)	981.10	49.71	10,400
P4-EF1.5-F (25)	71.52	26.10	10,400
P4-EF3-F (25)	87.30	11.12	10,400
P4-EF4.5-F (25)	56.64	17.15	10,400
P4-G4-F(24)	148.32	---	10,400
P4-G4-F(26)	74.16	---	10,400
P4-G3-F(24)	133.23	---	10,400
P4-G3-F(26)	85.79	---	10,400
P4-G2-F(24)	50.29	---	10,400
P4-G2-F(26)	121.90	---	10,400
P4-A1-W (20)	73,138.55	14,690	10,400
P5-B3.5-F(24)	32.04	14.06	10,400
P5-B3.5-F(26)	29.90	11.32	10,400
P5-B2-F(24)	2005.29	26.29	10,400
P5-B2-F(26)	683.06	133.29	10,400
P5-D2-F(25)	44.97	26.85	10,400
P5-D4-F(25)	45.81	22.57	10,400
P6-B4.5-F (25)	191.03	53.90	10,400
P6-D3-F(25)	107.30	66.71	10,400

Notes:

- Not measured.
  - (1) Total Organic Compounds is the sum of the detected compounds and 50% of the detection limit for non-detected compounds for PNAs (8270 SIMS), SVOCs (8270), and VOCs (8260).
  - (2) Total Petroleum Hydrocarbons (OA-2) by 3550B, 8015B for diesel, kerosene, mineral spirits, and motor oil and 50% of the detection limit for non-detected compounds.
  - (3) The  $f_{oc}$  value for the 0 to 3 foot depth interval was obtained from soil boring B-817 at 2' - 3' bgs. The  $f_{oc}$  value for the greater than 10 foot depth interval was obtained from soil boring B-851 from 19' - 20' bgs.
- Exceeds Site-Specific  $f_{oc}$ .

Table 5-13  
 Evaluation for Soil Attenuation  
 Champaign Former MGP  
 Ameren Illinois

Sample Identification	Total Organic Compounds Using 50% of Detection Limit <sup>(1)</sup> (mg/kg)	Total Petroleum Hydrocarbons <sup>(2)</sup> (mg/kg)	Site-Specific Soil $f_{oc}$ <sup>(3)</sup> (mg/kg)
P5-D2-F(25)	44.97	26.85	10,400
P5-D4-F(25)	45.81	22.57	10,400
P6-B4.5-F (25)	191.03	53.90	10,400
P6-D3-F(25)	107.30	66.71	10,400
P6-D3-F(26)	85.31	43.47	10,400
P6-D4.5-F(25)	76.55	35.99	10,400
P6-D4.5-F(26)	88.86	53.99	10,400
P7-GH1-F (16)	65.96	26.95	10,400
P7-G2-F (20)	64.47	27.08	10,400
P7-G2-F (16)	28.00	11.08	10,400
P7-F1-F (16)	56.56	17.47	10,400
P7-F1-F (20)	31.05	14.01	10,400
P7-B1.5-F (20)	50.38	<5.61	10,400
P7-B1.5-F (22)	50.25	<5.69	10,400
P7-B3.5-F (25)	65.05	16.15	10,400
P7-CD1-F (20)	70.65	<11.0	10,400
P7-CD1-F (22)	44.13	6.79	10,400
P7-CD3-F (25)	72.59	26.00	10,400
P7-E1-F (23)	48.06	15.53	10,400
P7-E23-F (23)	44.84	6.70	10,400
P8-G12-F (20 ft)	58.57	5.70	10,400
P8-G12-F (22 ft)	28.37	<5.54	10,400
P8-G3-F (20 ft)	55.70	6.81	10,400
P8-E1.2-F (20 ft)	67.36	12.30	10,400
P8-E3.4-F (20 ft)	53.49	<5.57	10,400
P8-E3.4-F (22 ft)	32.64	7.25	10,400
P8-E1.2-F (22 ft)	32.90	7.21	10,400
P9-G1.5-F (14 ft)	62.87	<5.63	10,400
P9-G1.5-F (16 ft)	47.37	<5.64	10,400
P9-G3-F (16.5)	44.46	<5.63	10,400
P9-G3-F (18)	45.25	<5.64	10,400
P9-FG 1.5-F (16)	40.24	16.80	10,400
P9-FG 1.5-F (18)	40.59	<5.62	10,400
P9-E3-F (16)	64.34	23.48	10,400
P9-E3-F (18)	32.49	7.09	10,400
P9-DE1.5-F (16)	289.64	16.80	10,400
P9-DE1.5-F (18)	132.35	6.15	10,400
P9-DE1.5-F (24)	243.59	5.64	10,400
P9-DE 1.5-F (26)	33.23	7.17	10,400
PA5-08 (3)	---	33,535	23,200
PA5-09 (3)	---	20,990	23,200
PA5-10 (3)	---	12,980	23,200

Notes:

--- Not measured.

(1) Total Organic Compounds is the sum of the detected compounds and 50% of the detection limit for non-detected compounds for PNAs (8270 SIMS), SVOCs (8270), and VOCs (8260).

(2) Total Petroleum Hydrocarbons (OA-2) by 3550B, 8015B for diesel, kerosene, mineral spirits, and motor oil and 50% of the detection limit for non-detected compounds.

(3) The  $f_{oc}$  value for the 0 to 3 foot depth interval was obtained from soil boring B-817 at 2' - 3' bgs. The  $f_{oc}$  value for the greater than 10 foot depth interval was obtained from soil boring B-851 from 19' - 20' bgs.

Exceeds Site-Specific  $f_{oc}$ .

Table 5-14  
Groundwater Analytical Data for BTEX, PAHs and Cyanide  
Comparison to Class I and Class II Groundwater Standards  
December 2012  
Champaign Former MGP Site  
Champaign, Illinois

CONSTITUENT	Class I Groundwater Standard	Class II Groundwater Standard	Units	UMW-102 12/13/2012	UMW-105 12/11/2012	UMW-106R 12/12/2012	UMW-107 12/11/2012	UMW-108 12/12/2012	UMW-109 12/13/2012	UMW-111A 12/12/2012	UMW-116 12/11/2012	UMW-117 12/12/2012	UMW-118 12/13/2012	UMW-119 12/13/2012
<b><i>Volatile Organic Compounds</i></b> <b><i>(8260B)</i></b>														
Benzene	0.005	0.025	mg/L	<0.002	<0.002	<0.002	0.1850	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.70	1.00	mg/L	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Toluene	1.0	2.5	mg/L	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (total)	10.0	10.0	mg/L	<0.005	<0.005	<0.005	0.011	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<b><i>Polynuclear Aromatic</i></b> <b><i>8270 SIMS</i></b>														
Acenaphthene	0.42	2.10	mg/L	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Acenaphthylene	0.21 <sup>(1)</sup>	1.05 <sup>(1)</sup>	mg/L	<0.0001	<0.0001	<0.0001	0.00023	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Anthracene	2.1	10.5	mg/L	<0.0001	<0.0001	<0.0001	0.00018	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(a)anthracene	0.00013	0.00065	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(a)pyrene	0.0002	0.0020	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(b)fluoranthene	0.00018	0.00900	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(g,h,i)perylene	0.21 <sup>(1)</sup>	1.05 <sup>(1)</sup>	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(k)fluoranthene	0.00017	0.00085	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chrysene	0.0015	0.0075	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dibenzo(a,h)anthracene	0.0003	0.0015	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluoranthene	0.28	1.40	mg/L	<0.0001	0.00024	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluorene	0.28	1.40	mg/L	<0.0001	0.00024	<0.0001	0.00009	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Indeno(1,2,3-cd)pyrene	0.00043	0.00215	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Naphthalene	0.14	0.22	mg/L	<0.0001	<0.0001	0.0001	0.0186	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001
Phenanthrene	0.21 <sup>(1)</sup>	1.05 <sup>(1)</sup>	mg/L	<0.0001	0.00135	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Pyrene	0.21	1.05	mg/L	<0.0001	0.00012	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Cyanide (total) 9012A	0.20	0.60	mg/L	<0.007	0.111	0.052	0.770	0.036	0.02	<0.007	<0.007	<0.007	0.048	0.037

Notes:

\* Shallow groundwater (UMW-100 series wells) is defined as Class II groundwater and intermediate groundwater (UMW-300 series wells) is defined as Class I groundwater as defined in IAC 35 Part 620.210 and 620.220.

<sup>(1)</sup> Non-TACO or provisional ROs published by the IEPA.

<sup>(2)</sup> Well UMW-122 had insufficient water volume to collect a sample.

Constituent exceeds Class I Groundwater Standards.

Constituent exceeds Class II Groundwater Standards.

mg/L Milligrams per liter

<0.0001 Not detected at the detection limit identified.

Table 5-14  
Groundwater Analytical Data for BTEX, PAHs and Cyanide  
Comparison to Class I and Class II Groundwater Standards  
December 2012  
Champaign Former MGP Site  
Champaign, Illinois

CONSTITUENT	Class I Groundwater Standard	Class II Groundwater Standard	Units	UMW-120 12/13/2012	UMW-121 12/11/2012	UMW-123 12/12/2012	UMW-124 12/11/2012	UMW-125 12/11/2012	UMW-126 12/10/2012	UMW-127 12/11/2012	UMW-300 12/13/2012	UMW-301R 12/12/2012	UMW-302 12/11/2012	UMW-303 12/12/2012	UMW-304R 12/11/2012
<b><i>Volatile Organic Compounds</i></b> <b><i>(8260B)</i></b>															
Benzene	0.005	0.025	mg/L	<0.002	<0.002	<0.002	0.085	0.0299	<0.002	0.0072	<0.002	<0.002	0.385	<0.002	0.0006
Ethylbenzene	0.70	1.00	mg/L	<0.005	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.512	<0.005	<0.005
Toluene	1.0	2.5	mg/L	<0.005	<0.005	<0.005	0.0271	<0.005	<0.005	0.0014	<0.005	<0.005	0.01	<0.005	<0.005
Xylene (total)	10.0	10.0	mg/L	<0.005	<0.005	<0.005	0.0131	<0.005	<0.005	0.0018	<0.005	0.0015	0.211	<0.005	0.0018
<b><i>Polynuclear Aromatic</i></b> <b><i>8270 SIMS</i></b>															
Acenaphthene	0.42	2.10	mg/L	<0.0001	<0.0001	<0.0001	0.00027	<0.0001	<0.0001	0.00029	<0.0001	0.00114	0.00017	<0.0001	0.0004
Acenaphthylene	0.21 <sup>(1)</sup>	1.05 <sup>(1)</sup>	mg/L	<0.0001	<0.0001	<0.0001	0.00016	<0.0001	<0.0001	0.00837	<0.0001	0.00202	0.00054	<0.0001	0.00126
Anthracene	2.1	10.5	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00011	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(a)anthracene	0.00013	0.00065	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(a)pyrene	0.0002	0.0020	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(b)fluoranthene	0.00018	0.00900	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(g,h,i)perylene	0.21 <sup>(1)</sup>	1.05 <sup>(1)</sup>	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(k)fluoranthene	0.00017	0.00085	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chrysene	0.0015	0.0075	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dibenzo(a,h)anthracene	0.0003	0.0015	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluoranthene	0.28	1.40	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluorene	0.28	1.40	mg/L	<0.0001	<0.0001	<0.0001	0.00015	<0.0001	<0.0001	0.00019	<0.0001	<0.0001	0.00016	<0.0001	<0.0001
Indeno(1,2,3-cd)pyrene	0.00043	0.00215	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Naphthalene	0.14	0.22	mg/L	<0.0001	0.00056	<0.0001	0.0169	0.00126	<0.0001	0.00353	<0.0001	0.00147	4.2	<0.0001	0.00306
Phenanthrene	0.21 <sup>(1)</sup>	1.05 <sup>(1)</sup>	mg/L	<0.0001	<0.0001	<0.0001	0.00017	0.00013	<0.0001	0.00031	<0.0001	<0.0001	<0.0001	<0.0001	0.00026
Pyrene	0.21	1.05	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Cyanide (total) 9012A	0.20	0.60	mg/L	<0.007	0.374	<0.007	0.005	0.021	<0.007	<0.007	<0.007	<0.007	0.139	<0.007	0.033

Notes:

\* Shallow groundwater (UMW-100 series wells) is defined as Class II groundwater and intermediate groundwater (UMW-300 series wells) is defined as Class I groundwater as defined in IAC 35 Part 620.210 and 620.220.

<sup>(1)</sup> Non-TACO or provisional ROs published by the IEPA.

<sup>(2)</sup> Well UMW-122 had insufficient water volume to collect a sample.

- Constituent exceeds Class I Groundwater Standards.
- Constituent exceeds Class II Groundwater Standards.
- mg/L Milligrams per liter
- <0.0001 Not detected at the detection limit identified.



Table 5-14  
Groundwater Analytical Data for BTEX, PAHs and Cyanide  
Comparison to Class I and Class II Groundwater Standards  
December 2012  
Champaign Former MGP Site  
Champaign, Illinois

CONSTITUENT	Class I Groundwater Standard	Class II Groundwater Standard	Units	UMW-305 12/12/2012	UMW-305 DUP 12/12/2012	UMW-306 12/12/2012	UMW-307 12/12/2012	UMW-308 12/12/2012
<b><i>Volatile Organic Compounds</i></b> <b><i>(8260B)</i></b>								
Benzene	0.005	0.025	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002
Ethylbenzene	0.70	1.00	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005
Toluene	1.0	2.5	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (total)	10.0	10.0	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005
<b><i>Polynuclear Aromatic</i></b> <b><i>8270 SIMS</i></b>								
Acenaphthene	0.42	2.10	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Acenaphthylene	0.21 <sup>(1)</sup>	1.05 <sup>(1)</sup>	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Anthracene	2.1	10.5	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(a)anthracene	0.00013	0.00065	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(a)pyrene	0.0002	0.0020	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(b)fluoranthene	0.00018	0.00900	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(g,h,i)perylene	0.21 <sup>(1)</sup>	1.05 <sup>(1)</sup>	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(k)fluoranthene	0.00017	0.00085	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chrysene	0.0015	0.0075	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dibenzo(a,h)anthracene	0.0003	0.0015	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluoranthene	0.28	1.40	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluorene	0.28	1.40	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Indeno(1,2,3-cd)pyrene	0.00043	0.00215	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Naphthalene	0.14	0.22	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	0.00209
Phenanthrene	0.21 <sup>(1)</sup>	1.05 <sup>(1)</sup>	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Pyrene	0.21	1.05	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Cyanide (total) 9012A	0.20	0.60	mg/L	0.023	0.025	0.019	0.071	0.03

Notes:

\* Shallow groundwater (UMW-100 series wells) is defined as Class II groundwater and intermediate groundwater (UMW-300 series wells) is defined as Class I groundwater as defined in IAC 35 Part 620.210 and 620.220.

<sup>(1)</sup> Non-TACO or provisional ROs published by the IEPA.

<sup>(2)</sup> Well UMW-122 had insufficient water volume to collect a sample.

Constituent exceeds Class I Groundwater Standards.

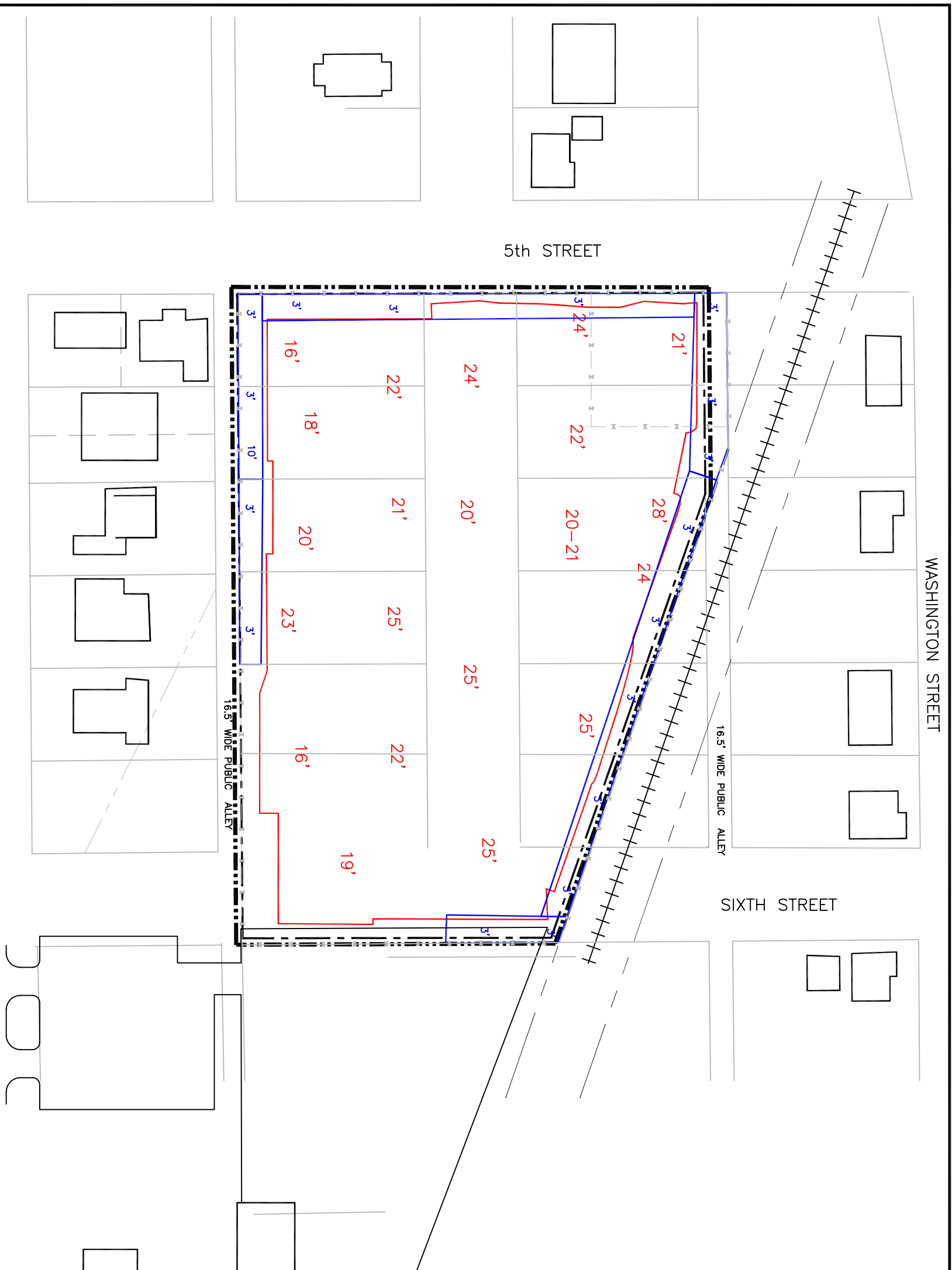
Constituent exceeds Class II Groundwater Standards.

mg/L Milligrams per liter

<0.0001 Not detected at the detection limit identified.

## List of Figures

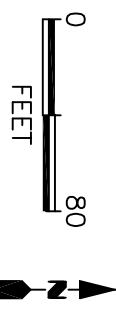
<b>Figure Number</b>	<b>Figure Name</b>
ES-1	Excavation Extents and Depths
1-1	Site Location Map
1-2	Remediation Site Map
1-3	Historical Site Features
2-1	Estimated Horizontal Extent of Soil Impact Above Tier 1 Remedial Objectives
3-1	Excavation Extents and Depths
4-1	Tent Phase Locations and Perimeter Excavation and Sample Locations
4-2	ISCO Pilot Study Area and Post-ISCO Sample Locations
4-3	Groundwater Monitoring Well Location Map
5-1	Confirmation Wall Samples Exceeding Tier 1 Remedial Objectives For Depth Intervals of 0 to 3 Foot BGS
5-2	Confirmation Wall Samples Exceeding Tier 1 Remedial Objectives For Depth Intervals of 3 to 10 Feet BGS
5-3	Confirmation Wall and Floor Samples Exceeding Tier 1 Remedial Objectives For Depth Intervals of Greater Than 10 Feet BGS
7-1	Proposed ISCO Treatment Areas



LEGEND

- EXISTING STRUCTURES (APPROXIMATE)
- - - NORFOLK SOUTHERN RAILWAY CORPORATION PROPERTY BOUNDARY
- · - · - · REMEDIATION SITE BOUNDARY
- x - x - FENCE
- TENT EXTENT OF EXCAVATION
- OPEN AIR EXTENT OF EXCAVATION
- 25' 25' EXCAVATION DEPTH

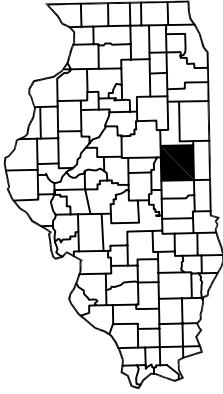
source:  
THE SOURCE FOR THE PROPERTY BOUNDARY SURVEY IS VEGRYN, SARVER AND ASSOCIATES.



TITLE:  
EXCAVATION EXTENTS AND DEPTHS  
PROJECT STATUS REPORT  
CHAMPAIGN FORMER MGP SITE

DWN:	TMM	DES:	LH	Project No:	62412010008
CHKD:	PTS	APPD:	MK	AMEREN ILLINOIS	CHAMPAIGN, ILLINOIS
DATE:	1/30/13	REV:	2	FIGURE ES-1	

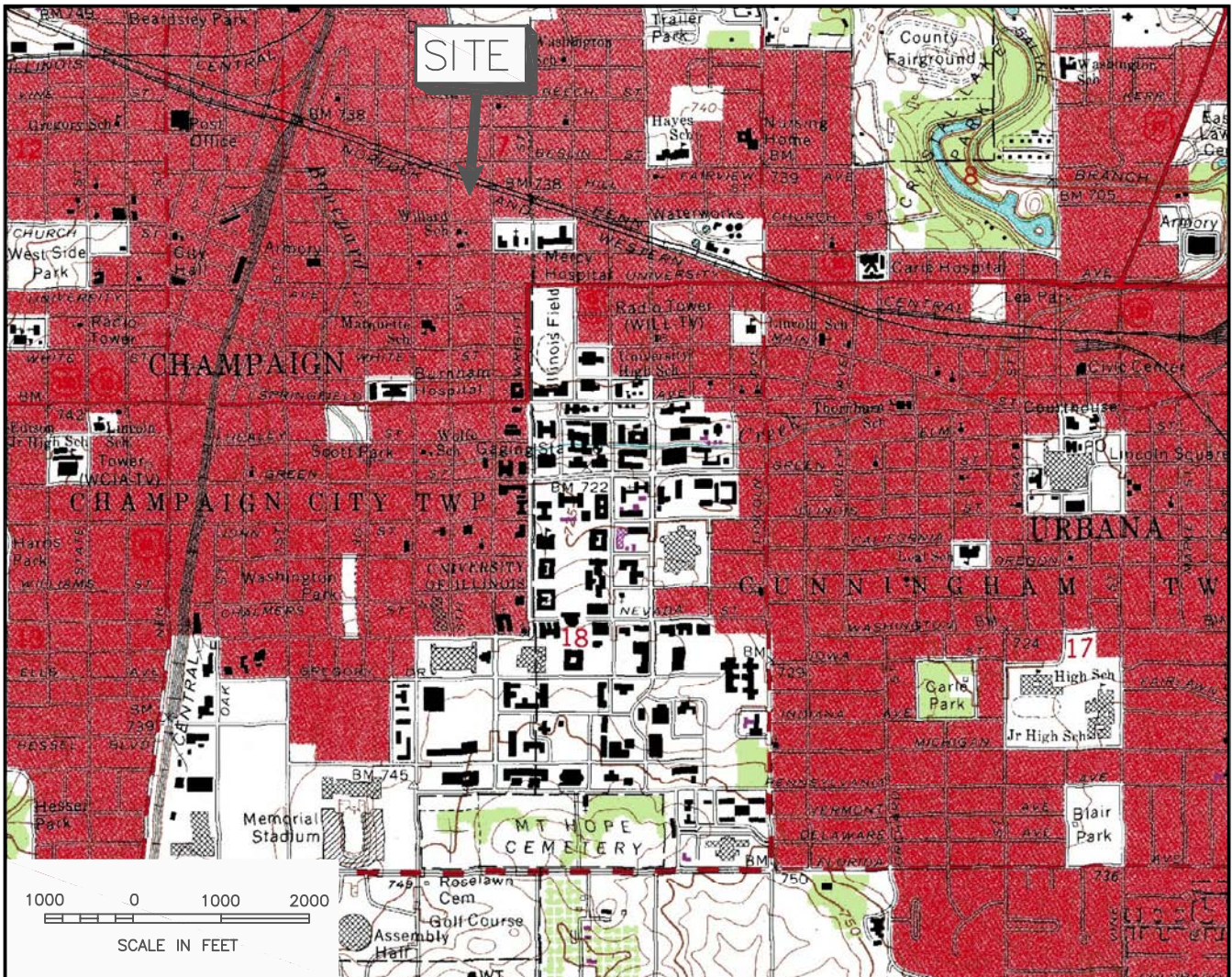
ILLINOIS



CHAMPAIGN COUNTY



AREA IN DETAIL



Modified from U.S. Geological Survey, Urbana, Illinois, quadrangle, Photorevised 1975.

SCALE IS VARIABLE



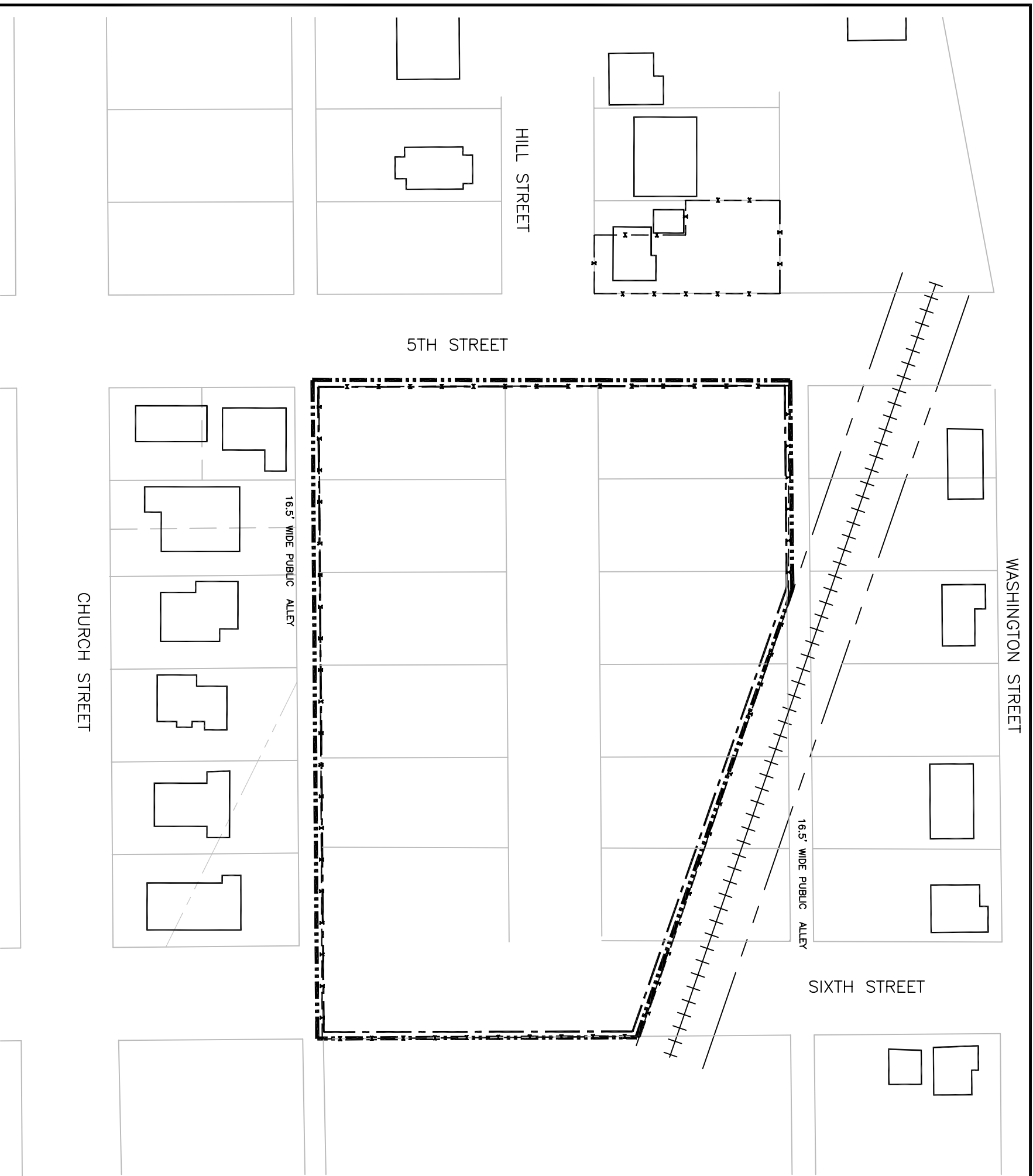
COL 624\00345E-001



TITLE:  
 SITE LOCATION MAP  
 PROJECT STATUS REPORT  
 CHAMPAIGN FORMER MGP SITE

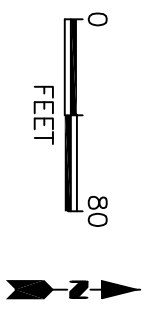
DWN: TMM  
 DES.: SPB  
 CHKD: LH  
 APPD: MK  
 DATE: 1/30/13  
 REV.: 2

PROJECT NO.: 6241201008  
 AMEREN ILLINOIS  
 CHAMPAIGN, ILLINOIS  
 FIGURE 1-1



- LEGEND**
- EXISTING STRUCTURES (APPROXIMATE)
  - - - CURRENT AMEREN ILLINOIS PROPERTY BOUNDARY
  - ■ ■ ■ ■ ■ REMEDIATION SITE BOUNDARY
  - x - x - FENCE

SOURCE: THE SOURCE FOR THE PROPERTY BOUNDARY SURVEY IS VEGZYN, SARVER AND ASSOCIATES.



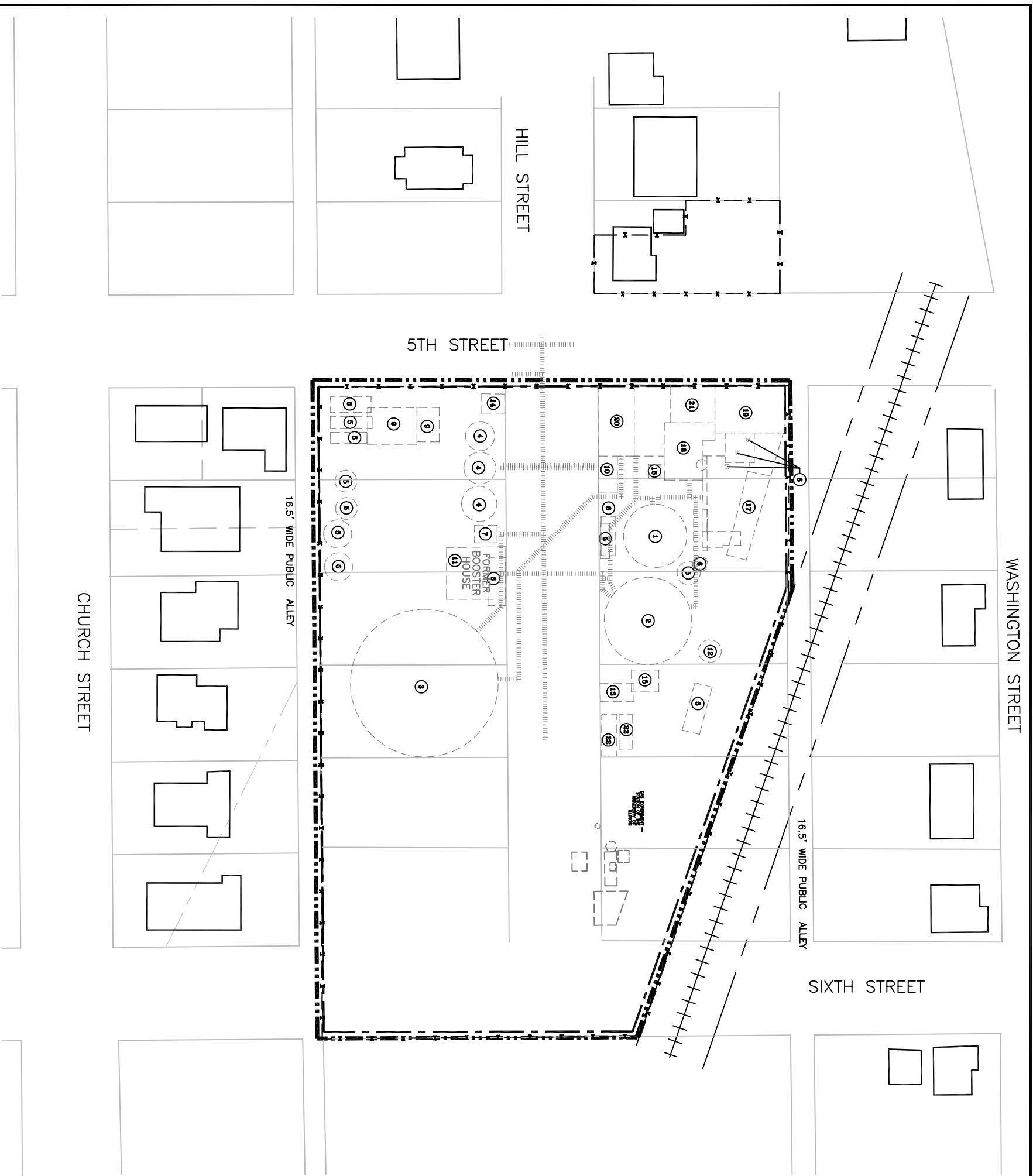
TITLE:  
 REMEDIATION SITE MAP  
 PROJECT STATUS REPORT  
 CHAMPAIGN FORMER MGP SITE

DWN:	TMM	DES:	MRC	Project No:	62412010008
CHKD:	LH	APPD:	MK	AMEREN ILLINOIS CHAMPAIGN, ILLINOIS	
DATE:	1/30/13	REV:	2	FIGURE 1-2	

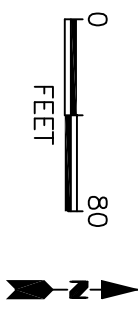


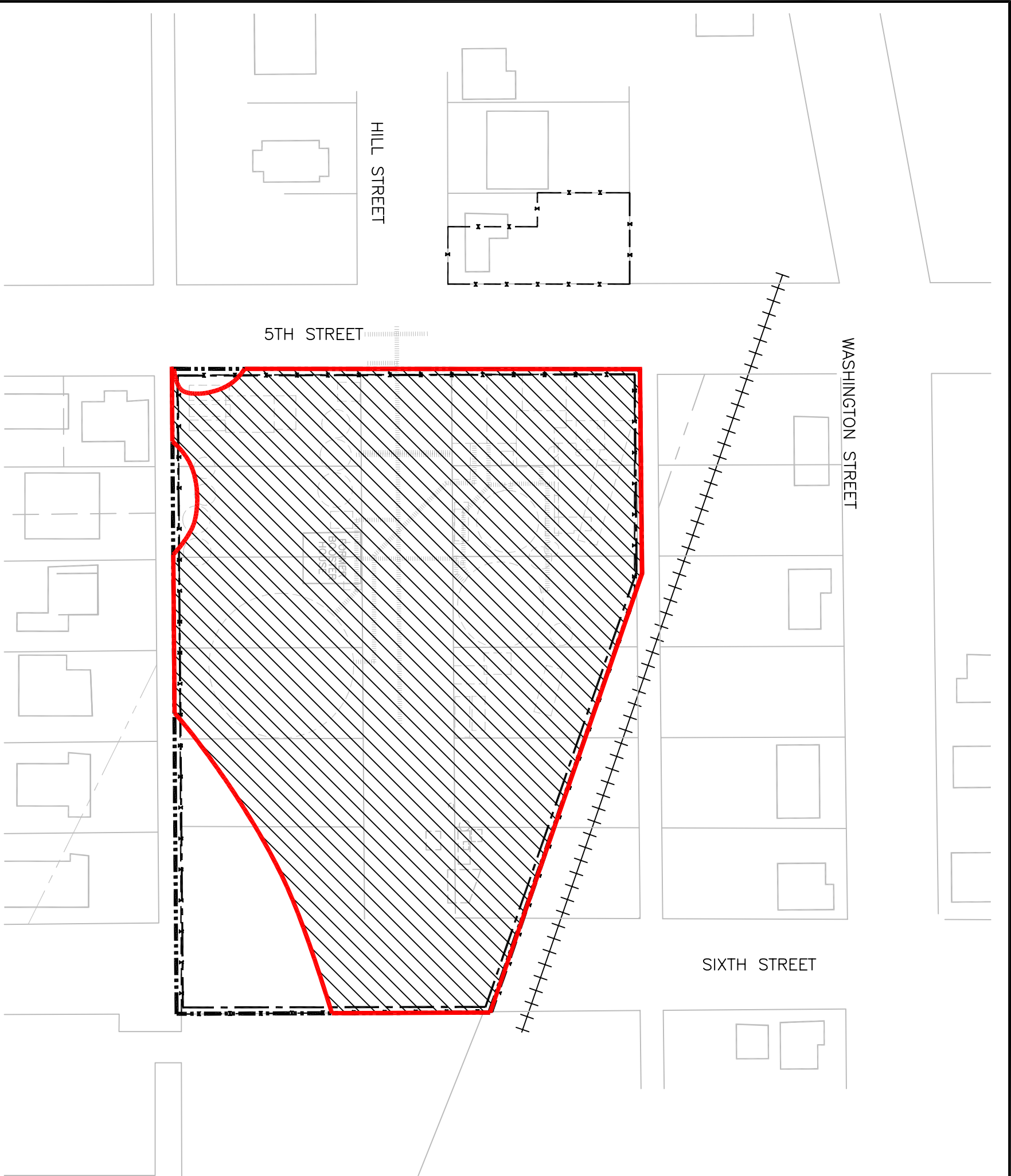
TITLE:  
 HISTORICAL SITE FEATURES  
 PROJECT STATUS REPORT  
 CHAMPAIGN FORMER MGP SITE

DWN:	TMM	DES:	MRC	Product No:	62412010008
CHKD:	PTS	APPD:	MK	AMEREN ILLINOIS	CHAMPAIGN, ILLINOIS
DATE:	1/30/13	REV:	2	FIGURE 1-3	



- LEGEND**
- HISTORICAL MANUFACTURED GAS PLANT STRUCTURES (APPROXIMATE)
  - - - FORMER GAS PLANT PIPING (APPROXIMATE)
  - CURRENT AMERENIP PROPERTY BOUNDARY
  - - - - - REMEDIATION SITE BOUNDARY
  - x - x - FENCE
- ① GAS HOLDER GH-1
  - ② GAS HOLDER GH-2
  - ③ GAS HOLDER GH-3
  - ④ PURIFIER
  - ⑤ OIL TANK
  - ⑥ TAR SEPARATOR
  - ⑦ SCRUBBER
  - ⑧ BOOSTER
  - ⑨ METER SHOP
  - ⑩ OFFICE
  - ⑪ PUMP HOUSE
  - ⑫ SETTLING TANK
  - ⑬ PUMP HOUSE / DEHYDRATOR HOUSE
  - ⑭ TOOL ROOM / OFFICE / GARAGE
  - ⑮ CRUSHER HOUSE
  - ⑯ WELL HOUSE
  - ⑰ COAL SHED
  - ⑱ WATER GAS ROOM
  - ⑲ RETORTS
  - ⑳ PURIFYING ROOM
  - ㉑ CONDENSING ROOM
  - ㉒ OIL TANK / TAR WELL
  - ㉓ BOILER ROOM
- SOURCE:  
 THE SOURCE FOR THE PROPERTY BOUNDARY SURVEY IS VEGRZYN, SARVER AND ASSOCIATES.





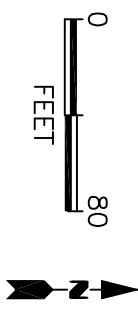
LEGEND

- HISTORICAL MANUFACTURED GAS PLANT STRUCTURES (APPROXIMATE)
- ..... FORMER GAS PLANT PIPING (APPROXIMATE)
- — — CURRENT AMEREN ILLINOIS PROPERTY BOUNDARY
- — — — — REMEDIATION SITE BOUNDARY
- x — x — FENCE
- / / / / / ESTIMATED HORIZONTAL EXTENT OF SOIL IMPACT ABOVE TIER 1 REMEDIAL OBJECTIVES PRIOR TO 2009 – 2011 REMEDIATION

NOTES:

1. Tier 1 RO exceedances are shown for on-site only. Off-site exceedances exist beyond the site boundary and will be addressed in separate documents.
2. The historical manufactured gas plant structures are a composite from sanborn fire insurance maps and historical Ameren Illinois site plans. The exact locations of the features are not known. Structures and buildings may have served multiple purposes during the operation of the plant.

SOURCE: THE SOURCE FOR THE PROPERTY BOUNDARY SURVEY IS VEGRZYŃ, SARVER AND ASSOCIATES.



TITLE: ESTIMATED HORIZONTAL EXTENT OF SOIL IMPACT ABOVE TIER 1 REMEDIAL OBJECTIVES PRIOR TO 2009 – 2011 REMEDIATION  
PROJECT STATUS REPORT – CHAMPAIGN FORMER MGP SITE

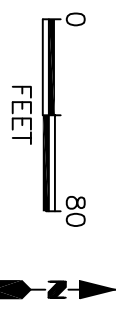
DWN:	TMM	DES:	MRC	Project No:	62412010008
CHKD:	LH	APPD:	MK	AMEREN ILLINOIS CHAMPAIGN, ILLINOIS	
DATE:	1/30/13	REV:	2	FIGURE 2-1	



LEGEND

- EXISTING STRUCTURES (APPROXIMATE)
- - - NORFOLK SOUTHERN RAILWAY CORPORATION PROPERTY BOUNDARY
- · - · - · REMEDIATION SITE BOUNDARY
- x - x - FENCE
- TENT EXTENT OF EXCAVATION
- OPEN AIR EXTENT OF EXCAVATION
- 25'** **25'** EXCAVATION DEPTH

source:  
THE SOURCE FOR THE PROPERTY BOUNDARY SURVEY IS VEGRYN, SARVER AND ASSOCIATES.

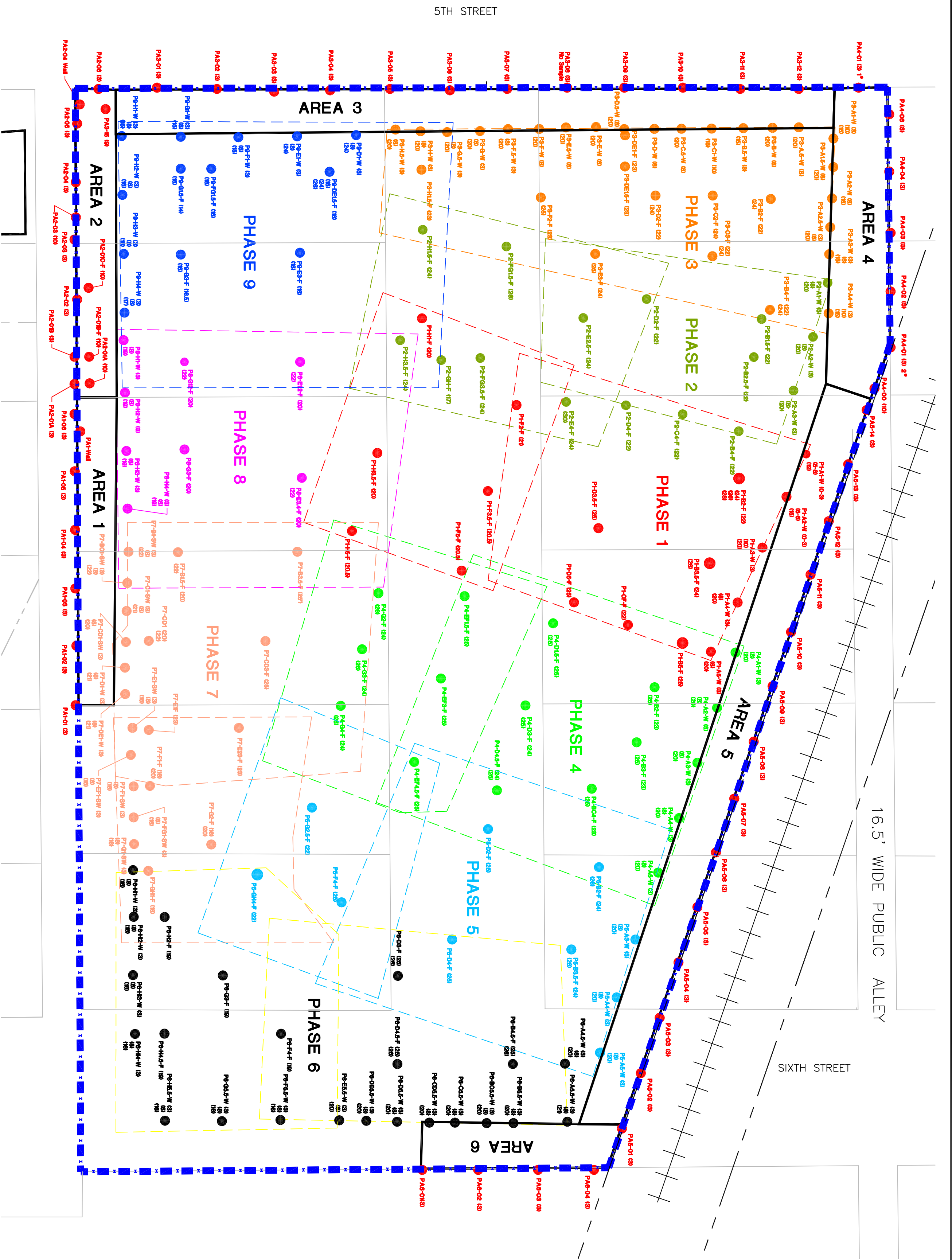


TITLE:  
EXCAVATION EXTENTS AND DEPTHS  
PROJECT STATUS REPORT  
CHAMPAIGN FORMER MGP SITE

DWN:	TMM	DES:	LH	Project No: 62412010008 AMEREN ILLINOIS CHAMPAIGN, ILLINOIS
CHKD:	PTS	APPD:	MK	
DATE:	1/30/13	REV:	2	

FIGURE 3-1





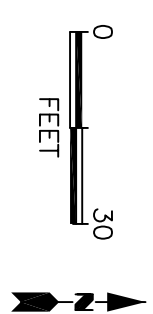
- LEGEND**
- EXISTING STRUCTURES (APPROXIMATE)
  - NORFOLK SOUTHERN RAILWAY CORPORATION PROPERTY BOUNDARY
  - REMEDIATION SITE BOUNDARY
  - - - FENCE
  - - - OPEN AIR PERIMETER EXCAVATION AREAS
  - P4-08 (S) SOIL CONFIRMATION SAMPLE LOCATION AND DEPTH
  - PHASE 1 TENT PHASE LOCATIONS
  - PHASE 2

**NOTES:**

1<sup>st</sup> Soil sample P4-01 (3) 1 is a soil sample location along the western remediation site boundary near 5th Street. It was collected on January 27, 2011.

2<sup>nd</sup> Soil sample P4-01 (3) 2 is a soil sample location along the northern remediation site boundary near the railroad tracks. It was collected on August 18, 2011.

SOURCE: THE SOURCE FOR THE PROPERTY BOUNDARY SURVEY IS VERZINI, SARKER AND ASSOCIATES.



PROJECT TITLE		CLIENT	
CHAMPAIGN FORMER MCP SITE		AMEREN ILLINOIS	
NO.	REVISION	BY	DATE

SHEET TITLE  
TENT PHASE LOCATIONS AND PERIMETER EXCAVATION AND SAMPLE LOCATIONS

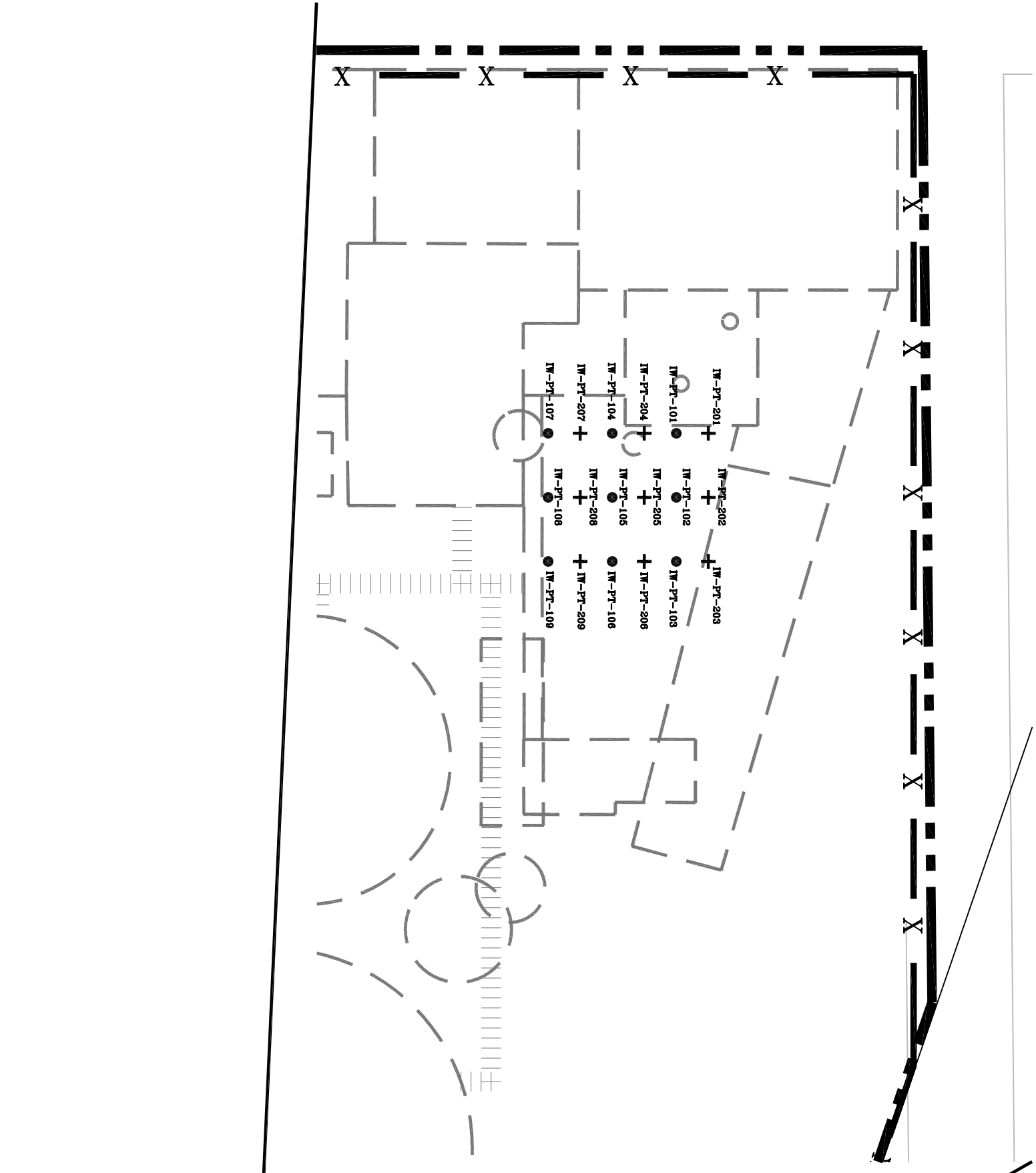


DATE	11/7/12	DRAWN BY	TMM	DRAWING NO.	FIGURE 4-1
PROJECT NUMBER	62412010008	CHECKED BY	LH		
		APPROVED BY	MK		

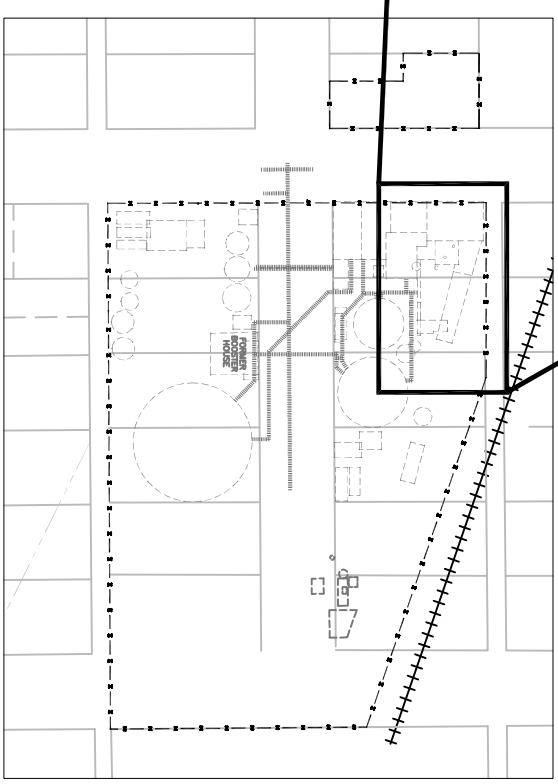
COL. 624\028480-008



TITLE:  
 ISCO PILOT STUDY AREA AND POST-ISCO SAMPLE LOCATIONS  
 PROJECT STATUS REPORT  
 CHAMPAIGN FORMER MGP SITE



SOURCE: THE SOURCE FOR THE PROPERTY BOUNDARY SURVEY IS VEGZYN, SARVER AND ASSOCIATES.



LEGEND

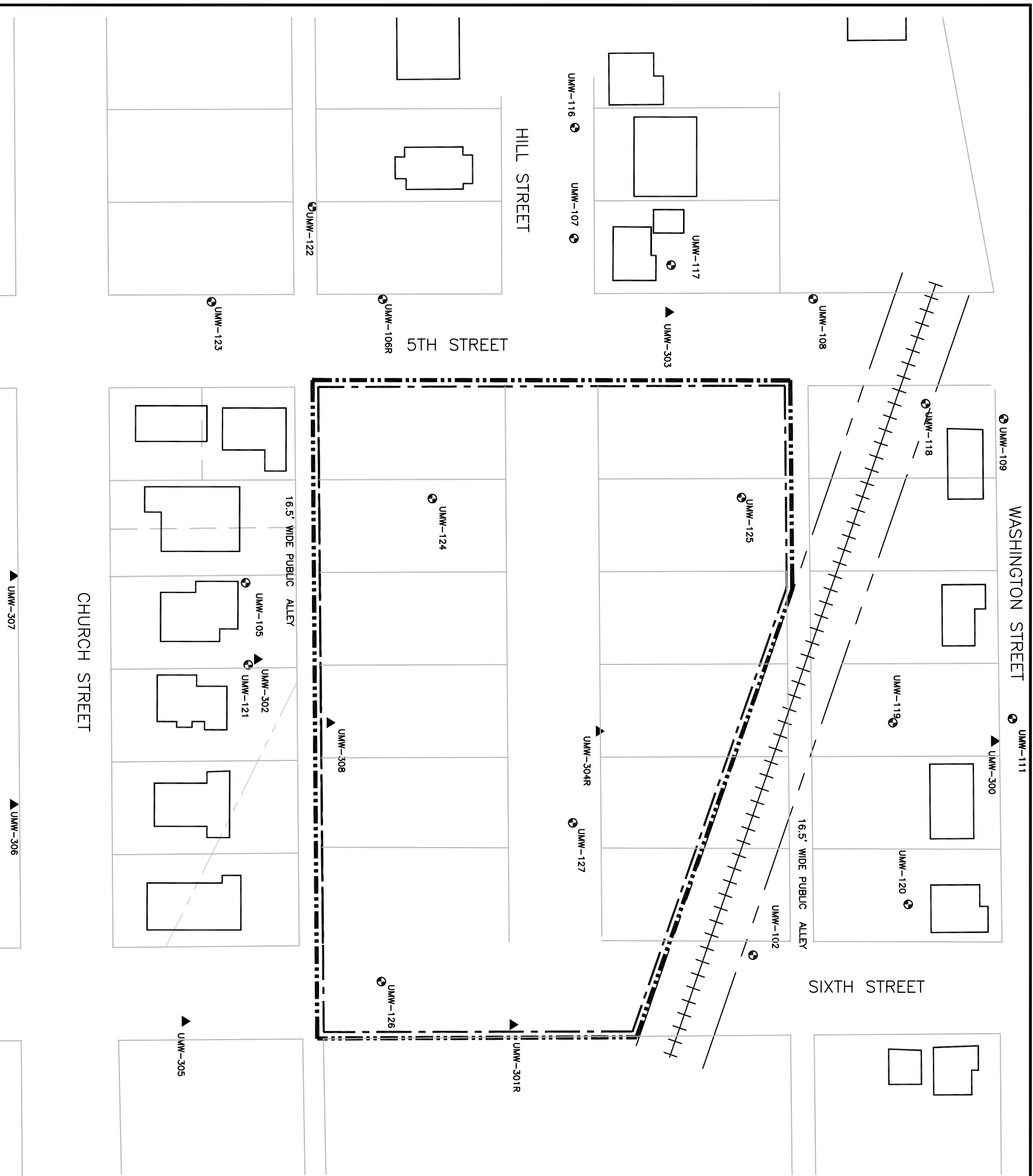
- HISTORICAL MANUFACTURED GAS PLANT STRUCTURES (APPROXIMATE)
- FORMER GAS PLANT PIPING (APPROXIMATE)
- EXISTING STRUCTURES (APPROXIMATE)
- AMEREN ILLINOIS PROPERTY BOUNDARY (FORMER MGP SITE)
- X- FENCE
- SHALLOW INJECTION WELL (15')
- + DEEP INJECTION WELLS (25')

DWN:	TMM	DES:	MRC	Project No:	62412010008
CHKD:	PS	APPD:	MK	AMEREN ILLINOIS CHAMPAIGN, ILLINOIS	
DATE:	1/30/13	REV:	2	FIGURE 4-2	



TITLE:  
 GROUNDWATER MONITORING WELL LOCATION MAP  
 PROJECT STATUS REPORT  
 CHAMPAIGN FORMER MGP SITE

DWN:	TMM	DES:	SC	Project No: 62412010008 AMEREN ILLINOIS CHAMPAIGN, ILLINOIS
CHKD:	LH	APPD:	MK	
DATE:	1/30/13	REV:	2	



- LEGEND
- EXISTING STRUCTURES (APPROXIMATE)
  - - - CURRENT AMEREN ILLINOIS PROPERTY BOUNDARY
  - REMEDIATION SITE BOUNDARY
  - UMW-100 SHALLOW GROUNDWATER MONITORING WELLS
  - ▲ UMW-300 INTERMEDIATE GROUNDWATER MONITORING WELLS

SOURCE: THE SOURCE FOR THE PROPERTY BOUNDARY SURVEY IS VEGZYN, SARVER AND ASSOCIATES.

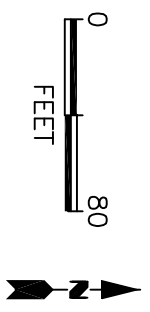
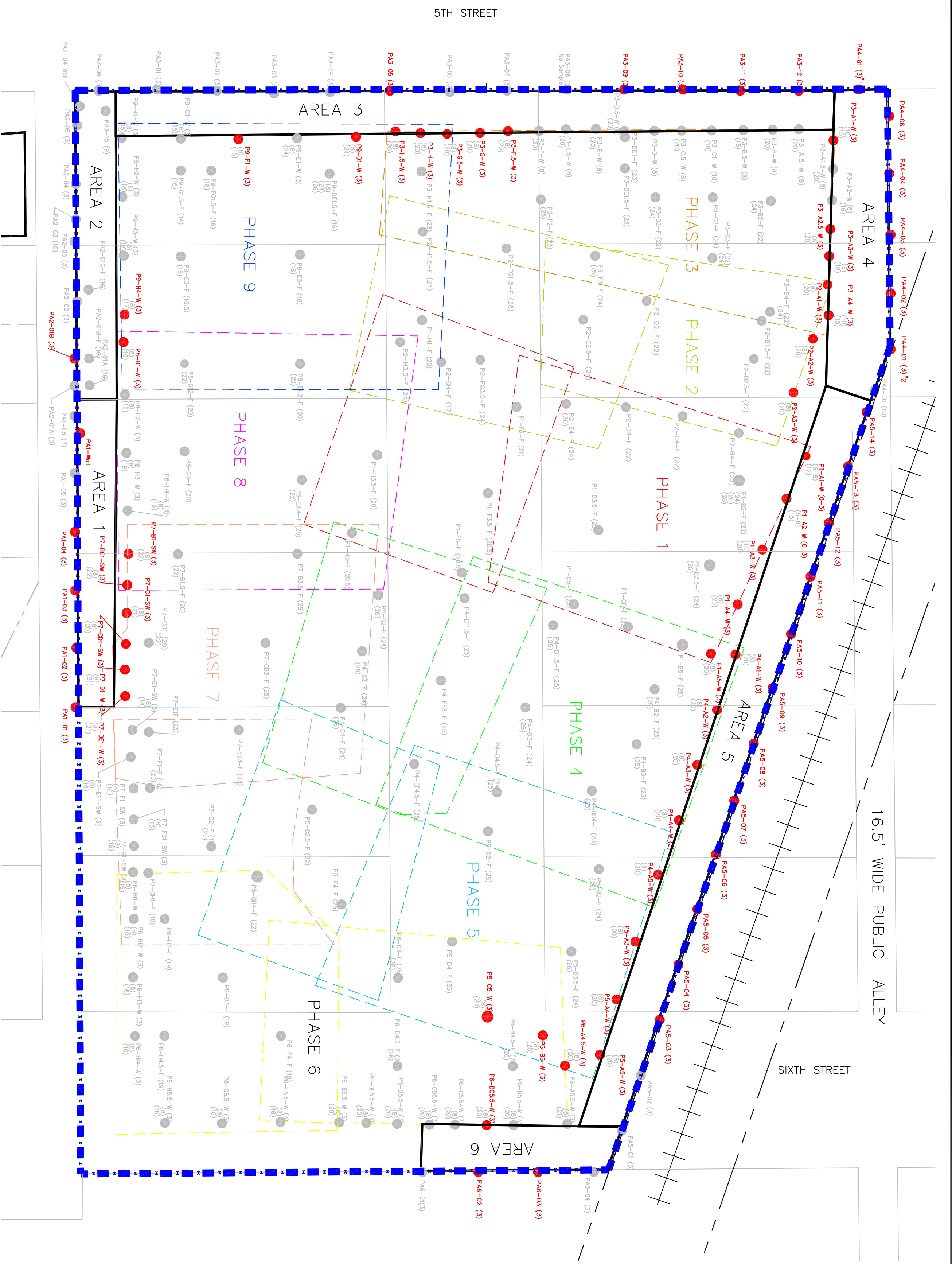


FIGURE 4-3

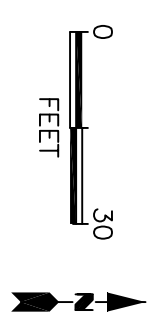


- LEGEND**
- EXISTING STRUCTURES (APPROXIMATE)
  - NORFOLK SOUTHERN RAILWAY CORPORATION PROPERTY BOUNDARY
  - REMEDIATION SITE BOUNDARY
  - FENCE
  - OPEN AIR PERIMETER EXCAVATION AREAS
  - P4-01(3) SOIL SAMPLES EXCEEDING TIER 1 REMEDIAL OBJECTIVES FOR 0 TO 3 FOOT DEPTH INTERVALS
  - PHASE 1 TENT PHASE LOCATIONS

**NOTES:**

- 1<sup>st</sup> Soil sample P4-01 (3) 1 is a soil sample location along the western remediation site boundary near 5th Street. It was collected on January 27, 2011.
- 2<sup>nd</sup> Soil sample P4-01 (3) 2 is a soil sample location along the northern remediation site boundary near the railroad tracks. It was collected on August 18, 2011.
3. Tier 1 RO exceedances are shown for on-site only. Off-site exceedances exist beyond the site boundary and are addressed in separate document.

SOURCE: THE SOURCE FOR THE PROPERTY BOUNDARY SURVEY IS VEKZIN, SARKER AND ASSOCIATES.



NO.	REVISION	BY	APPR.	DATE

CLIENT: AMEREN ILLINOIS

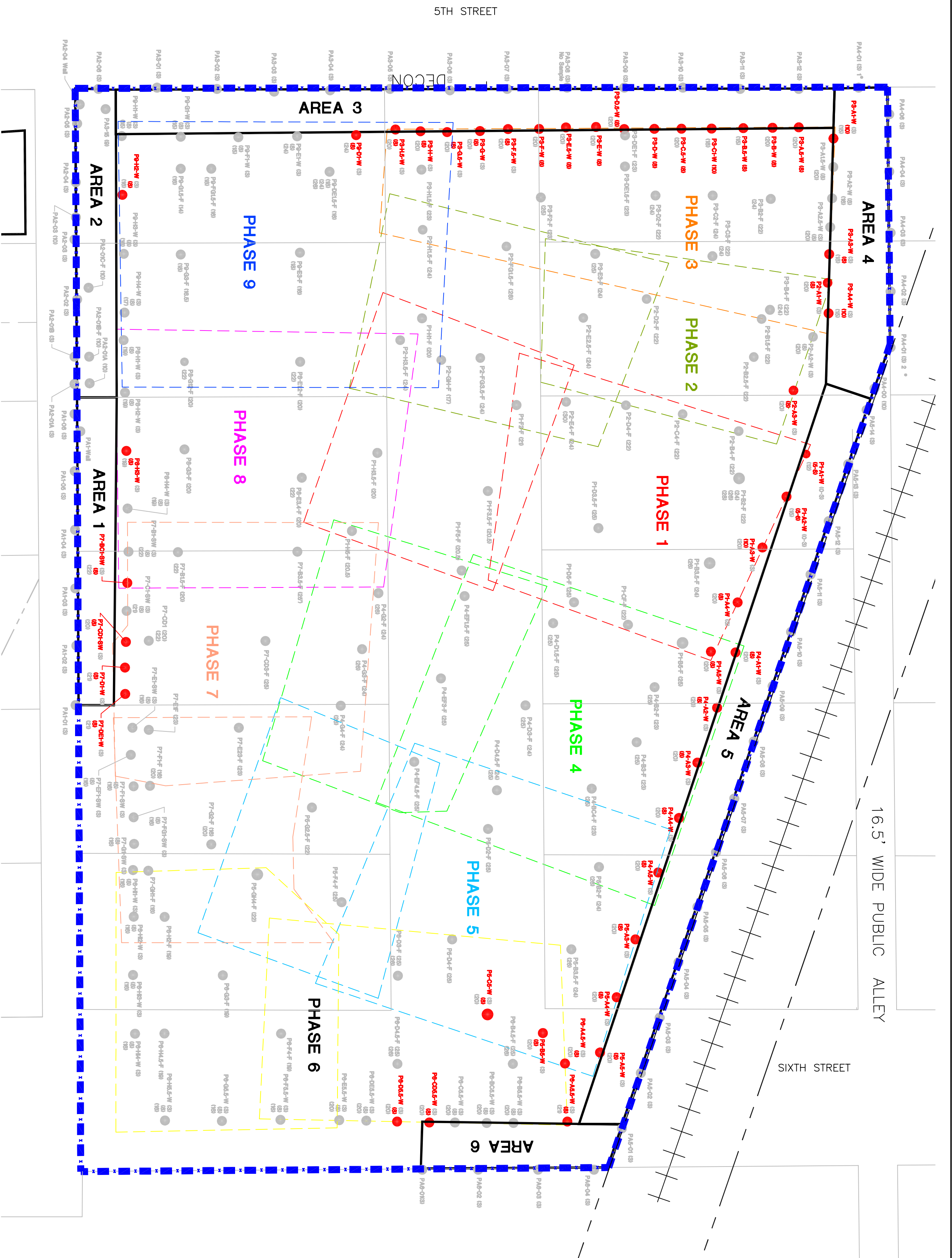
PROJECT TITLE: CHAMPAIGN FORMER MGP SITE

SHEET TITLE: CONFIRMATION WALL SAMPLES EXCEEDING TIER 1 REMEDIAL OBJECTIVES FOR DEPTH INTERVALS 0 TO 3 FEET

DATE: 11/7/12	DRAWN BY: TMM	DRAWING NO.:
PROJECT NUMBER: 62412010008	CHECKED BY: LH	FIGURE 5-1
	APPROVED BY: MK	



6241202480-009 COL.



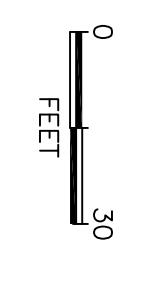
**LEGEND**

- EXISTING STRUCTURES (APPROXIMATE)
- NORFOLK SOUTHERN RAILWAY CORPORATION PROPERTY BOUNDARY
- REMEDIATION SITE BOUNDARY
- FENCE
- HAY BALLS
- OPEN AIR PERIMETER EXCAVATION AREAS
- SOIL SAMPLES EXCEEDING TIER 1 REMEDIATION OBJECTIVES FOR 0 TO 3 FOOT DEPTH INTERVALS
- TERTIARY PHASE LOCATIONS

**NOTES:**

- 1<sup>st</sup> Soil samples PA4-01 (3) 1 is a soil sample location along the western remediation site boundary near 5th Street. It was collected on January 27, 2011.
- 2<sup>nd</sup> Soil samples PA4-01 (3) 2 is a soil sample location along the northern remediation site boundary near the railroad tracks. It was collected on August 18, 2011.
3. Tier 1 RO exceedances are shown for on-site only. Off-site exceedances exist beyond the site boundary and are addressed in separate document.

SOURCE: THE SOURCE FOR THE PROPERTY BOUNDARY SURVEY IS VERZINI, SANDER AND ASSOCIATES.



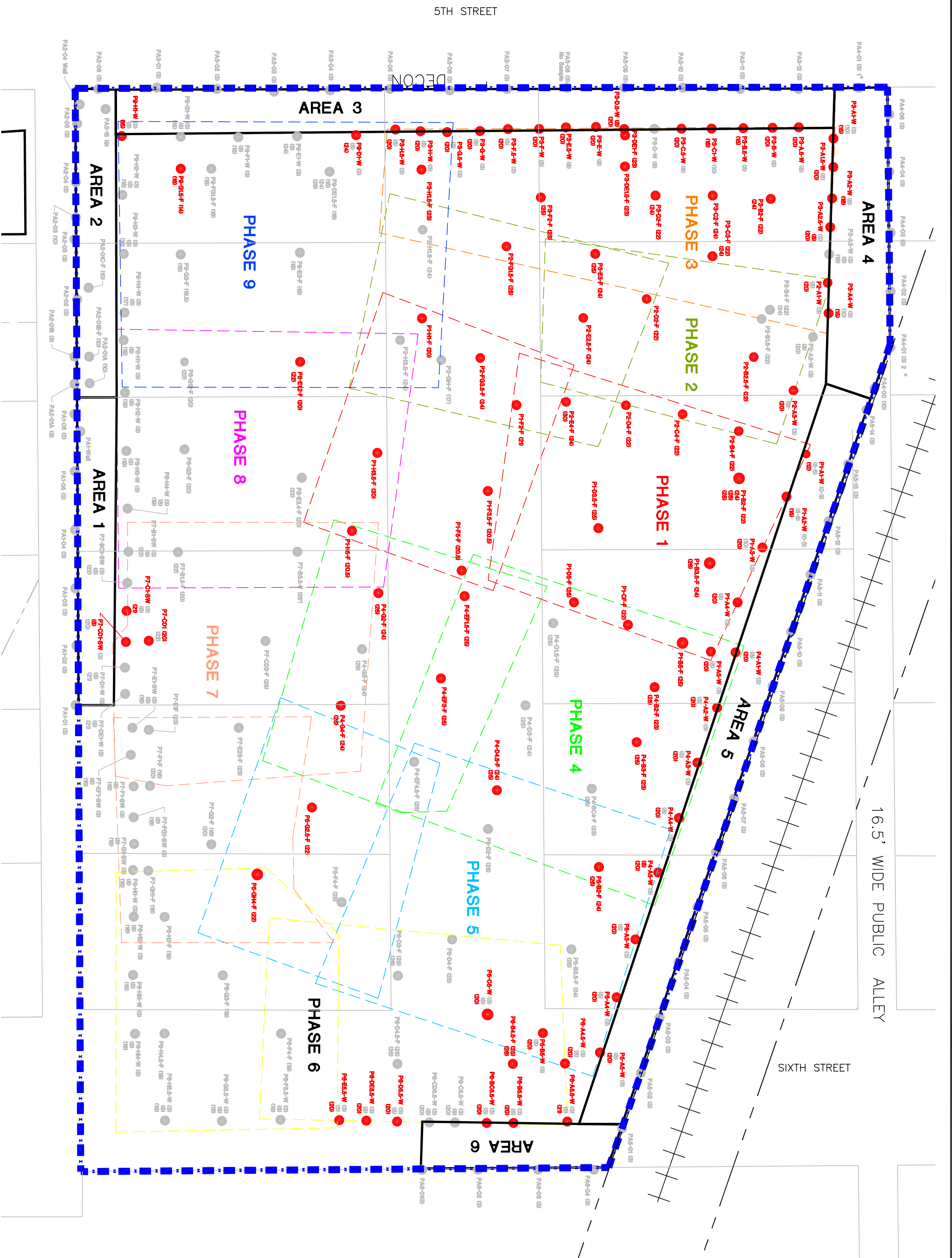
SHEET TITLE  
CONFIRMATION WALL SAMPLES EXCEEDING TIER 1  
DEPTH INTERVALS 3 TO 10 FEET BGS

DATE	11/7/12	DRAWN BY	TMM	DRAWING NO.	FIGURE 5-2
PROJECT NUMBER	62412010008	CHECKED BY	LH		
		APPROVED BY	MK		

NO.	REVISION	BY	APPR.	DATE

CLIENT  
AMEREN ILLINOIS

PROJECT TITLE  
CHAMPAIGN FORMER MGP SITE



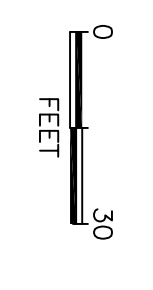
LEGEND

- EXISTING STRUCTURES (APPROXIMATE)
- NORFOLK SOUTHERN RAILWAY CORPORATION PROPERTY BOUNDARY
- REMEDIATION SITE BOUNDARY
- FENCE
- HAY BALLS
- OPEN AIR PERIMETER EXCAVATION AREAS
- P4-03 (3) SOIL SAMPLES EXCEEDING TIER 1 REMEDIAL OBJECTIVES FOR 0 TO 3 FOOT DEPTH INTERVALS
- PHASE 1 TENT PHASE LOCATIONS

NOTES:

- 1<sup>st</sup> Soil samples P44-01 (3) 1 is a soil sample location along the western remediation site boundary near 5th Street. It was collected on January 27, 2011.
- 2<sup>nd</sup> Soil samples P44-01 (3) 2 is a soil sample location along the northern remediation site boundary near the railroad tracks. It was collected on August 18, 2011.
3. Tier 1 RO exceedances are shown for on-site only. Off-site exceedances exist beyond the site boundary and are addressed in separate document.

SOURCE: THE SOURCE FOR THE PROPERTY BOUNDARY SURVEY IS VERZINI, SARKER AND ASSOCIATES.



SHEET TITLE  
 CONFIRMATION WALL AND FLOOR SAMPLES  
 EXCEEDING TIER 1 REMEDIAL OBJECTIVES FOR  
 DEPTH INTERVALS GREATER THAN 10 FEET BGS

DATE	11/7/12	DRAWN BY	TMM	DRAWING NO.
PROJECT NUMBER	62412010008	CHECKED BY	LH	FIGURE 5-3
		APPROVED BY	MK	

PROJECT TITLE		AMEREN ILLINOIS	
CHAMPAIGN FORMER MGP SITE			
NO.	REVISION	BY	APPR. DATE

62412010008-011

COL.

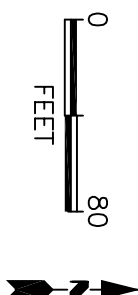


TITLE:  
**PROPOSED ISCO TREATMENT AREAS**  
**PROJECT STATUS REPORT**  
**CHAMPAIGN FORMER MGP SITE**



- LEGEND**
- EXISTING STRUCTURES (APPROXIMATE)
  - - - NORFOLK SOUTHERN RAILWAY CORPORATION PROPERTY BOUNDARY
  - · - · - REMEDIATION SITE BOUNDARY
  - x - x - FENCE
  - TREAT AREAS WITHIN FOR INHALATION TO DEPTHS FROM 3 TO 10 FEET BGS
  - TREAT AREAS TO DEPTHS GREATER THAN 20 FEET BGS

SOURCE: THE SOURCE FOR THE PROPERTY BOUNDARY SURVEY IS VEGRZYN, SARVER AND ASSOCIATES.



DWN:	TMM	DES:	TE	PROJECT NO: 62409080008 AMEREN ILLINOIS CHAMPAIGN, ILLINOIS
CHKD:	LH	APPD:	MHK	
DATE:	1/30/13	REV:	2	FIGURE 7-1

## APPENDIX A

### Wastewater Laboratory Analytical Datasheets



## APPENDIX B

Soil Sample Laboratory Analytical Datasheets - Backfill

## APPENDIX C

### Analytical Results of ISCO Pilot Study

## APPENDIX D

### Well Construction and Well Abandonment Forms

## APPENDIX E

### Field Hydraulic Conductivity Testing Datasheets

## APPENDIX F

Soil Sample Laboratory Analytical Datasheets – Remedial Action Confirmation Samples

## APPENDIX G

Soil Sample Laboratory Analytical Datasheets – Remedial Action Perimeter Samples