0190100008 -- Champaign Co.
Champaign/IP Town Gas
SR/Tech Reports

Illinois Environmental Protection Agency
Bureau of Land
Remedial Project Management Section
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

FOR ILLINOIS EPA USE:
LOG NO. _____

Site Remediation Program Form (DRM-2)
(To Be Submitted with all Plans and Reports)

I. Site Identification:

Site Name: Champaign Former Manufactured Gas Plant Site
Street Address: 308 N. Fifth Street P.O. Box: _____
City: Champaign State: IL Zip: 61826 Phone: _____
Illinois Inventory I. D. Number: 0190100008 IEMA Incident Number: _____

II. Remediation Applicant:

Applicant's Name: Brian Martin Company: AmerenIP
Street Address: 1901 Chouteau Avenue P.O. Box: 66149
City: St. Louis State: MO ZIP Code: 63166-6149 Phone: 314-554-2233

I hereby request that the Illinois EPA review and evaluate the attached project documents in accordance with the terms and conditions of the Environmental Protection Act (415 ILCS 5), implementing regulations, and the review and evaluation services agreement.

Remediation Applicant's Signature: Brian H. Martin Date: 12/11/08

III. Contact Person:

Contact's Name: Derek D. Ingram
Company: PSC Industrial Outsourcing, LP
Street Address: 210 West Sand Bank Road
P.O. Box: _____
City: Columbia State: IL ZIP Code: 62236
Phone: 618-281-7173

Contact's Name: _____
Company: _____
Street Address: _____
P.O. Box: _____
City: _____ State: ___ ZIP Code: _____
Phone: _____

IV. Review & Evaluation Licensed Professional Engineer or Geologist ("RELPEG"), if applicable:

RELPEG's Name: _____ Company: _____
Street Address: _____ P.O. Box: _____
City: _____ State: ____ ZIP Code: _____ Phone: _____
Registration Number: _____ License Expiration Date: _____

All information submitted is available to the public except when specifically designated by the Remediation Applicant to be treated confidentially as a trade secret or secret process in accordance with the Illinois Compiled Statutes, Section 7(a) of the Environmental Protection Act, applicable Rules and Regulations of the Illinois Pollution Control Board and applicable Illinois EPA rules and guidelines. The Illinois EPA is authorized to require this information under Sections 415 ILCS 5/58 - 58.12 of the Environmental Protection Act and regulations promulgated thereunder. Disclosure of this information is required as a condition of participation in the Site Remediation Program. Failure to do so may prevent this form from being processed and could result in your plan(s) or report(s) being rejected. This form has been approved by the Forms Management Center.

RELEASABLE RECEIVED
DEC 19 2008 DEC 12 2008
REVIEWER MD IEPA/BOL

V. Project Documents Being Submitted:

Document Title: Remedial Objectives Report Date of Preparation of Plan or Report: 12/5/2008

Prepared by: PSC Industrial Outsourcing, LP Prepared for: AmerenIP

Type of Document Submitted:

- ☐ Site Investigation Report - Comprehensive
- ☐ Site Investigation Report - Focused
- ☑ Remediation Objectives Report-Tier 1or 2
- ☐ Remediation Objectives Report-Tier 3
- ☐ Remedial Action Plan
- ☐ Remedial Action Completion Report
- ☐ Sampling Plan
- ☐ Health and Safety Plan
- ☐ Community Relations Plan
- ☐ Risk Assessment
- ☐ Contaminant Fate & Transport Modeling
- ☐ Other: _____

Document Title: Remedial Action Plan Date of Preparation of Plan or Report: 12/11/ 2008

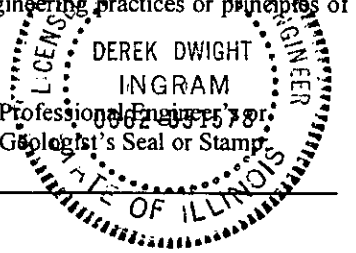
Prepared by: PSC Industrial Outsourcing, LP Prepared for: AmerenIP

Type of Document Submitted:

- ☐ Site Investigation Report - Comprehensive
- ☐ Site Investigation Report - Focused
- ☐ Remediation Objectives Report-Tier 1or 2
- ☐ Remediation Objectives Report-Tier 3
- ☑ Remedial Action Plan
- ☐ Remedial Action Completion Report
- ☐ Sampling Plan
- ☐ Health and Safety Plan
- ☐ Community Relations Plan
- ☐ Risk Assessment
- ☐ Contaminant Fate & Transport Modeling
- ☐ Other: _____

VI. Professional Engineer's or Geologist's Seal or Stamp:

I attest that all site investigations or remedial activities that are the subject of this plan(s) or report(s) were performed under my direction, and this document and all attachments were prepared under my direction or reviewed by me, and to the best of my knowledge and belief, the work described in the plan and report has been designed or completed in accordance with the Illinois Environmental Protection Act (415 ILCS 5), 35 Ill. Adm. Code 740, and generally accepted engineering practices or principles of professional geology, and the information presented is accurate and complete.



Professional Engineer's or Geologist's Seal or Stamp

Engineer or Geologist Name: Derek D. Ingram

Company: PSC Industrial Outsourcing, LP Phone: 618-281-1568

Registration Number: 62-051578

Signature: _____ License Expiration Date: 11/30/09

Note: The authority of a Licensed Professional Geologist to certify documents submitted to the Illinois Environmental Protection Agency for review and evaluation pursuant to Title XVII of the Environmental Protection Act is limited to Site Investigation Reports (415 ILCS 58.7(f), as amended by P.A. 92-0735, effective July 25, 2002). A Licensed Professional Geologist cannot certify Remediation Objectives Reports, Remedial Action Plans or Remedial Action Completion Reports.

Remedial Objectives Report
Former Manufactured Gas Plant
Champaign, Illinois
State ID 0190100008

December 5, 2008

Prepared for:

AMEREN SERVICES

St. Louis, Missouri

Columbia, Illinois

Remedial Objectives Report
Former Manufactured Gas Plant
Champaign, Illinois

December 5, 2008

Prepared for:

AMEREN SERVICES

ST. LOUIS, MISSOURI

PSC INDUSTRIAL OUTSOURCING, LP
210 West Sand Bank Road
Columbia, Illinois 62236-0230

Project 62403053

Executive Summary

AmerenIP is submitting this Remediation Objectives Report (ROR) for the Former Champaign Manufactured Gas Plant (MGP) site located at 308 North 5th Street in Champaign, Illinois. Site investigation activities have been performed and the results presented in the *Comprehensive Site Investigation Report, For AmerenIP Champaign, Illinois Former Manufactured Gas Plant, State ID 0190100008* (CSIR) dated December 2007 and the *Off-Site Investigation Report, Former Manufactured Gas Plant, Champaign Illinois, State ID 0190100008* (OSIR) dated August 22, 2008. Subsurface impact indicative of MGP operations was identified encompassing the entire remediation site. The subsurface impact has been delineated for the constituents of concern listed on Table ES-1.

Twenty-six constituents of concern (COC) in soil and twenty COC in groundwater have been identified. This ROR presents an evaluation of the COCs and describes the proposed exposure pathway exclusions. Ameren has elected to use a combination of soil excavation and disposal, in-situ chemical oxidation, and institutional controls to address the site impact. The remedial approach will be presented in the Remedial Action Plan (RAP). Additionally, AmerenIP has established project remediation objectives (ROs) that reflect the use of the most stringent Tier 1 ROs outlined in Illinois Administrative Code (IAC) Section 742. Tier 2 or Tier 3 evaluations may be performed following the above mentioned remediation activities as a method to address site residuals.

Upon implementation of the methods for pathway exclusion that are outlined in this ROR and in an accompanying RAP, Ameren intends to meet the requirements for a NFR letter for the remediation site.

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1 INTRODUCTION

PSC Industrial Outsourcing, LP has prepared this Remedial Objectives Report (ROR) on behalf of AmerenIP, for the former Manufactured Gas Plant (MGP) located in Champaign, Illinois (Figure 1-1). This ROR is being submitted in accordance with Title 35 of the Illinois Administrative Code (IAC) Section 740.445 to establish the remedial objectives for the remediation site and illustrate how the recognized environmental conditions (RECs) will be addressed for the former MGP site. The RECs and subsurface impact exceeding Tier 1 Remediation Objectives (ROs) identified during site investigation activities and were presented in the *Comprehensive Site Investigation Report, For AmerenIP Champaign, Illinois Former Manufactured Gas Plant, State ID 0190100008* (CSIR) dated December 2007 and the *Off-Site Investigation Report, Former Manufactured Gas Plant, Champaign Illinois, State ID 0190100008* (OSIR) dated August 22, 2008.

The former MGP facility was located at 308 North Fifth Street (formerly 502 East Hill Street), Champaign, Illinois. The remediation site is currently owned by AmerenIP and is enrolled in the Illinois Environmental Protection Agency's (IEPA) Site Remediation Program (SRP) under state ID 0190100008. During the investigation activities limited impact was identified on some neighboring properties as well as portions of Fifth and Sixth Streets and an active railroad right of way. Investigation activities and approaches for addressing the impact on the properties not owned by AmerenIP are addressed in separate RORs and RAPs. Figure 1-2 identifies the extent of the remediation site covered by this report, and the area for which AmerenIP will request a No Further Remediation (NFR) letter.

Impact was identified during the site investigation activities that exceed Tier 1 ROs. All soil impact above the most stringent Tier 1 ROs located within the top 10 feet of ground surface will be addressed through soil removal and disposal. AmerenIP will then perform in-situ chemical oxidation to remediate impact greater than the site remediation objectives. The methods and approaches to be used for meeting requirements for a NFR letter are discussed in this document as well as the accompanying RAP.

2 SITE DESCRIPTION

The following sections provide a brief description of the remediation site. A full description of the remediation site, the regional setting, and the operational history and historical use of the properties as required under Section 740.435(b)(2) is in the CSIR dated December 2007.

2.1 Site Information

The Site is located within the city limits of Champaign, Illinois in Champaign County in the northeast quarter of the southwest quarter of Section 7, Township 19 North, Range 9 East of the Third Principal Meridian. The Site address is 308 North Fifth Street (formerly 502 East Hill Street), Champaign, Illinois. The property is currently vacant, secured by a chain-link fence, and owned by AmerenIP. Figure 1-1 illustrates the approximate location of the Site. The general area around the Site consists of both residential and commercial properties. Figure 1-2 depicts the remediation site boundaries and the layout of the surrounding properties.

A single active track railroad right-of-way (Norfolk-Southern) borders the Site to the north and several residential properties are located north of the railroad right-of-way. The Sixth Street right-of-way is adjacent to the east of the Site; however, Sixth Street is closed between the railroad right-of-way and the alley south of the Site. Other property east of the vacated Sixth Street right-of-way is commercial. Residential properties to the south are separated from the Site by the chain link fence and an active alley. North Fifth Street borders the Site to the west and separates the Site from residential properties to the west. At one time, Hill Street approximately bisected the Site in the east-west direction; but the street has been vacated and is now part of the Site owned by AmerenIP.

2.2 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), AmerenIP files, and other historical documents.

Historical information relative to the Site indicates that gas was manufactured on the Site as early as 1869 and continued through 1933 (i.e. at least 64 years). Gas was produced by coal carbonization, oil gasification, and carbureted water gas methods during various periods of operation. After operations ceased in 1932 or 1933, the plant was maintained for stand-by production purposes until about 1955. Plant facilities were demolished, with the exception of the booster house, between 1955 and 1960. Although the property remained vacant, Illinois Power, a predecessor of AmerenIP, 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.

Past site features identified through historical documents are depicted on Figure 2-1. The former gas plant and associated buildings, three tar wells, two gas holders (GH-1 and GH-2),

and two oil tanks were 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.

2.3 Subsurface Geology

The subsurface geology has been characterized using the methods described in Section 2 of the CSIR. The general subsurface geology for the remediation site consists of:

- Surficial fill material;
- Weathered till unit;
- Unweathered till unit; and
- Lower silty sand unit of the Glasford Formation.

A brief description of the geologic units are provided below. More detailed geologic descriptions for each of the properties of the remediation site are presented in Section 2.6 of the CSIR.

2.3.1 Surficial Fill Layer

The surficial fill layer is typically 3 to 4 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 was completed. Some topsoil encountered may have been classified as fill material based on a dark organic appearance which resembles the known fill on Site. Topsoil was also placed over portions of the Site where CSI test pits were excavated. The fill is thickest in an isolated area along the northern portion of the Site near the railroad tracks.

2.3.2 Weathered Till Unit

The first natural subsurface material encountered is a weathered till unit. The unit is continuous beneath the study area and is believed to be part of the Batestown Till Member of the Wisconsinan Wedron Formation. The Weathered Till Unit was contacted at various depths beneath the study area. 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. MGP residual staining is present along some of these fractures. Numerous minor sand and silty sand layers were encountered; however, the sand layers are laterally discontinuous. Residual impacts are frequently associated with sandy and silty layers. The distinction between the weathered and unweathered till units was often difficult to distinguish.

2.3.3 Unweathered Till Unit

The Unweathered Till Unit is also believed to be part of the Batestown Till Member of the Wisconsinan 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 bgs. Sand and gravel layers were also encountered within the Unweathered Till Unit; however, these layers were not laterally continuous beneath the Site.

2.3.4 Lower Silty Sand Unit

Three deep boreholes drilled during the Phase II 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 Illinoisan Glasford Formation. The actual contact between Wedron and Glasford was not delineated due to the similarities between the units and the rotary wash drilling method used in the deeper boreholes.

2.4 Hydrogeologic Conditions

The following sections provide a brief description of the groundwater bearing units and the groundwater flow conditions at the remediation site.

2.4.1 Shallow Groundwater System

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 and is currently monitored by eighteen wells. Groundwater in the shallow system beneath most of the study area generally flows in a north/northwest direction with a somewhat radial pattern from the site. The configuration of the shallow water table in September 2008 is shown on Figure 2-2. Depth to the shallow groundwater system typically ranges from 3 to 10 feet bgs. Additional groundwater data from previous events is presented in the CSIR dated December 2007.

Groundwater flow gradients differ considerably between the southern and northern parts of the Site. The shallow groundwater system near the southern edge of the Site has a hydraulic gradient of about 0.08 foot per foot. The groundwater flow rate is about 7.5 feet/year based on an averaged observed hydraulic conductivity of 9.1×10^{-5} cm/sec from the slug tests performed in wells UMW-104 and UMW-106. Groundwater velocity could be as high as 30 feet/year using an effective porosity of 25 percent. The shallow groundwater system for the remainder of the Site has a hydraulic gradient of about 0.01 foot per foot. The resulting groundwater flow rate is about 0.33 foot/year based on an average hydraulic conductivity of 3.2×10^{-5} cm/sec from the slug tests performed in wells UMW-102 and UMW-108. Groundwater velocity could be as high as 1.3 feet/year using an effective porosity of 25 percent. Calculation methods were presented in the RI report (Burlington, 1994).

2.4.2 Intermediate Groundwater System

Eight groundwater monitoring wells were installed at a depth of forty-five feet bgs during the 2008 off-site investigation to encounter an intermediate sand unit. Wells were cased to a depth of approximately 29.5 feet bgs with a screened interval of 35.0 to 45.0 feet bgs. One well was installed off-site to the north and west; three wells were installed off-site to the south, one well was installed off-site to the southeast, and one well was installed off-site to

the east. An additional well was installed on-site in the former Hill Street right-of-way. Water levels taken in September 2008 ranged from 26.0 to 28.0 feet bgs. The configuration of the intermediate water table in September 2008 is shown on Figure 2-3. Groundwater generally flows in a southeast direction.

Slug testing was performed in four of the eight intermediate wells (UMW-301, UMW-302, UMW-303, and UMW-304) during the off-site investigations. The horizontal hydraulic conductivity values ranged from 2.80×10^{-2} centimeters per second to 8.63×10^{-2} centimeters per second. The mean hydraulic conductivity calculated using data from the four wells was 4.85×10^{-2} centimeters per second, or 137.5 feet per day. Hydraulic conductivity calculations were presented in the OSIR.

2.4.3 Deep Groundwater System

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 to the west-southwest.

The three deep wells installed during the Phase II Site Investigation were plugged and abandoned in 1999. During the period between 1992 and 1998 when these wells were being monitored, no impacts were detected. Since there is a downward gradient from the shallow groundwater unit to the deeper aquifer, these wells were plugged to prevent them from acting as a potential conduit from shallow impacted soils to the deeper aquifer.

2.5 Recognized Environmental Conditions

Historical information relative to the Site indicates that gas was manufactured on the Site as early as 1869 and continued through 1933 (i.e. at least 64 years). Gas was produced by coal carbonization, oil gasification, and carbureted water gas methods during various periods of operation. After operations ceased in 1932 or 1933, the plant was maintained for stand-by production purposes until about 1955. Plant facilities were demolished, with the exception of the booster house, between 1955 and 1960. Although the property remained vacant, AmerenIP maintained ownership of the property until 1979 when it was sold to the American Legion. AmerenIP repurchased the property from the American Legion in 1991 after preliminary environmental investigations indicated the presence of MGP related impacts at the Site. Additional historical information for the former MGP was presented in the CSIR dated December 2007.

Based on historical data and observations during previous activities, RECs were identified and the 2004 CSI activities were completed to define those conditions. Figure 2-1 illustrates approximate locations of historical MGP structures on the Site. The following sections discuss environmental conditions that exist at the Site as determined during CSI activities.

2.5.1 Former Tar Wells

Three tar wells (TW1, TW2, and TW3) have been identified at the Site. TW1 and TW2 had diameters measuring approximately 10.7 feet. TW1 was covered with a brick and concrete lid approximately 8-inches thick that was supported by rails. Above the lid was a concrete foundation 12-inches thick containing metal rebar. The tops of TW1 and TW2 were located approximately 2 feet bgs, and their bottoms were located at approximately 10 feet bgs. The walls and floors were constructed of brick and mortar. Tar well TW3 had a diameter measuring 19.3 feet wide, and a depth measuring 10 feet bgs. The walls were constructed of brick and mortar and the bottom was constructed of 6-inches of concrete. The environmental impacts from these tar wells would have been from releases through the sides and bottom. The material from each of the three tar wells was removed in 1997; therefore, these structures no longer serve as a source for continued release.

2.5.2 Former Tar Separator

One tar separator was previously identified at the Site. The dimensions of the separator were approximately 10 feet in diameter with depths of 6 to 10.5 feet bgs. The walls and base were constructed of concrete with interior wooden baffles. The upper 2 feet contained clean fill material with the remainder of the backfill saturated with fluid tar. The valve box was located east of the separator and was approximately 9 feet wide on each side with brick walls extending to 5 feet bgs. The floor of the separator consisted of only native clay till material. Environmental impacts related to this structure could have been from releases of source material through the base of the separator, the valve box, or from piping. The contents of the separator were removed in 1997; therefore, this structure no longer serves as a source for further releases.

2.5.3 Former Purifiers

Three concrete purifier pads were previously identified at the Site. Purifier waste consisted mainly of wood shavings, coal, and cinders. Releases from purifiers would primarily have been cyanide and other inorganic constituents. The contents and pad structures have been removed; therefore, they no longer serve as a source for further release.

2.5.4 Former Gas Holder Tank GH-1

Gas holder tank GH-1 was constructed prior to 1869 and was converted to a tar well in 1924. This below ground structure contained a significant quantity of source material and was the primary focus of the IRM removal actions in 1997. The prior release of MGP related material could have occurred through the base or sidewalls of the structure or from underground piping going into the structure. The contents of GH-1 were removed in 1997; thus mitigating further releases to the subsurface.

2.5.5 Former Gas Holder Tank GH-2

Gas holder tank GH-2 was constructed prior to 1902 and was the focus of CSI test pit and boring activity. Based on the Site history and the period of operation, this gas holder tank

may have been used as a relief holder during part of the operation. Evidence from the 2004 CSI appears to indicate that this former gas holder was a belowground structure, with confirmed presence of the structures including walls, valve pit, and piping. No solid bottom was encountered. CSI soil sample analytical results indicate significant levels of MGP impacts within the GH-2 gas holder tank. This structure will be a primary focus during remedial activities.

2.5.6 Former Gas Holder Tank GH-3

Gas holder tank GH-3 was constructed between 1909 and 1915. Historical photographs indicate that the tank was constructed above grade on a concrete slab. The foundation slab and both inlet and outlet valve pits were located during CSI activities. The bottom of the valve pits are about 8.5 feet bgs and both pits contained some tar-like liquid.

2.5.7 Former Oil And Diesel Storage Tanks

Seven above grade oil and diesel storage tanks were located along the southwest property line from the early 1920s until plant demolition in the 1950s. In addition, other oil storage tanks on the northern portion of the property were used at various times during the operation of the MGP. Environmental impacts from these structures could be related to piping and accidental spillage and would most likely have been either surface or shallow subsurface releases. The decommissioning and removal of these structures in the late 1950s has served to eliminate any continued releases from the former aboveground tanks. The CSI analytical results confirmed the presence of some minor impacts near the southwest property fence-line.

2.5.8 North Property Line

The northern AmerenIP property line extends from Sixth Street just north of vacated Hill Street northeast along the railway to the alley, and continues west along the alley to Fifth Street. No MGP activities occurred north of the railroad tracks; however, impact appears to have migrated to that area. CSI test pit and boring activities focused on locating an environmental pathway from the Site MGP operations to the north side of the railroad tracks. Impact was observed north of the railroad right-of-way during the 2008 off-site investigation activities; however, no potential point source was identified. Impact along the northern property line within the remediation site boundary will be addressed through excavation and disposal.

2.5.9 East Property Line and Former Gas Experiment Station

The eastern property line extends from the railway south along the western right-of-way of Sixth Street to the active alley. MGP-related impact was identified in a monitoring well located in the vacated Sixth Street right-of-way east of the AmerenIP property. Historical MGP activities did not occur in this area; however, the “Gas Experiment Station of the University of Illinois” was located near the northeast corner of the AmerenIP property and MGP impact appears to have migrated into the vacated Sixth Street right-of-way. In addition, a sixteen-inch diameter gas main is known to exist within the vacated Sixth Street

right-of-way. The gas main was used for the distribution of gas and is not believed to contain tar, but it will be further investigated during the Remedial Action.

2.5.10 Vacated Hill Street Right-of-Way

Although no actual MGP operations activities occurred in the Hill Street right-of-way, gas mains were located within the right-of-way and piping between various operations was buried under the street. Due to impacts identified during CSI activities in borings and test pits located within the right-of-way, Hill Street is identified as a REC. Impacts observed within the right-of-way could be from piping, incidental spillage, or migration from other MGP structures and operations.

3 IDENTIFICATION OF CONSTITUENTS OF CONCERN

This section presents the Tier 1 screening results for the site. An evaluation was performed by comparing the analytical soil and groundwater results from the CSI and the Off-Site Investigation to the Tier 1 ROs set forth in IAC Section 742. From the comparison, a site-specific list of constituents of concern (COCs) was identified. Table 3-1 presents a list of COCs identified at the remediation site. Any constituent that exceeded the Tier 1 ROs in any sample was defined as a site-specific COC. The following sections discuss the COCs in detail.

3.1 Tier 1 Evaluation

The analytical results from soil and groundwater samples were compared to the Tier 1 ROs set forth in IAC Section 742 for all potential exposure pathways and all property use scenarios. Table 3-2 provides a summary of all COCs for the remediation site by pathways, property use scenarios, and soil horizons. There are thirty-one COCs that have been identified for the remediation site.

Figure 3-1 illustrates the locations of soil borings and test pits that are included in this report.

3.2 Screening Results Summary

Results of the Tier 1 screening are discussed in the following subsections based on compound or compound group. All laboratory analytical results for soil and groundwater samples are summarized in Tables 3-3 through 3-18.

3.2.1 Volatile Organic Compounds

A total of one hundred fifty (150) soil samples collected on site were analyzed for the four BTEX constituents (benzene, toluene, ethylbenzene, and xylene) as these constituents are typically associated with MGP-related impact. Analytical results for BTEX from the CSIR and OSIR are presented in Tables 3-3 through 3-5. Seventeen soil samples were also analyzed for a full list of volatile organic compounds (VOCs). Analytical results for VOCs are presented in Tables 3-6 through 3-8. Through a Tier 1 comparison, all four BTEX constituents, acetone, methylene chloride, and styrene were identified as COCs. All four BTEX constituents are COCs for the soil inhalation and soil component to groundwater ingestion exposure pathways. Benzene is the only BTEX constituent identified as a COC for the soil ingestion pathway. Acetone, methylene chloride, and styrene are COCs for the soil component to groundwater ingestion pathway. Styrene is a COC for the indoor and outdoor inhalation exposure pathway from one location, B-507. Although acetone and methylene chloride have been identified, these constituents are not typically associated with MGP operations.

Figures 3-2 through 3-4 illustrate Tier 1 Exceedances of BTEX constituents in soil by depth interval.

Benzene, ethylbenzene, and toluene were also identified as COC for groundwater. Samples collected from wells UMW-107, UMW-110, and UMW-114, and UMW-115 have contained benzene concentrations exceeding Class I groundwater standards in quarterly sampling events since 2004. Ethylbenzene has also been identified in well UMW-114 in quarterly sampling events. Toluene concentrations exceeding the Class I groundwater standard were identified in well UMW-101 during Phase II activities; however, UMW-101 has since been abandoned. Toluene has been detected in monitoring wells UMW-107, UMW-110, UMW-114, and UMW-115 in previous sampling events; however the concentrations did not exceed the Class I groundwater standard. Groundwater analytical results for VOCs from the September 2008 sampling event are shown on Table 3-9. Analytical results from previous sampling events were presented in the CSIR.

3.2.2 Semivolatile Organic Compounds and Polycyclic Aromatic Hydrocarbons

One hundred fifty (150) soil samples were analyzed for polycyclic aromatic hydrocarbons (PAHs), and twenty-one soil samples were analyzed for a full list of semivolatile organic compounds (SVOCs). Twelve PAH constituents were identified as COCs. The twelve constituents are: acenaphthene, acenaphthylene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluorene, indeno(1,2,3,cd)pyrene, naphthalene, and phenanthrene. Soil analytical results for PAHs are presented on Tables 3-3 through 3-5.

Two SVOCs, dibenzofuran and 2-methylnaphthalene, were also identified as COCs onsite. Dibenzofuran is a COC for the soil ingestion and soil component to groundwater ingestion exposure pathways and 2-methylnaphthalene is a COC for the indoor inhalation and soil component to groundwater ingestion exposure pathways. Analytical results for SVOCs are presented in Tables 3-10 through 3-12. Although dibenzofuran has been identified, this constituent is not typically associated with MGP operations.

Thirteen SVOCs have been identified as COC for groundwater. The July 2004 groundwater sampling event identified acenaphthylene, acenaphthene, and fluorene in four samples; naphthalene in three samples; anthracene, flouranthene, phenanthrene and pyrene in two samples; and benzo(a)anthracene in one sample. The 2008 sampling events (May, September) identified only benzo(a)anthracene, naphthalene and 2-methylnaphthalene above Class I groundwater standards. Groundwater analytical results for SVOCs for the September 2008 sampling event are presented on Table 3-13.

3.2.3 Inorganic Constituents

Soil samples were analyzed for thirteen metals and cyanide. The following subsections present a summary of the inorganic COCs that were identified for the Site. Inorganic COC were identified only in the 0 to 3 foot depth interval at the locations illustrated on Figure 3-5.

3.2.3.1 Metals

Arsenic, chromium, and lead were identified as COCs in surface soils. Arsenic and lead are COCs for the soil ingestion and soil component to groundwater ingestion exposure pathways.

Chromium is a COC for the soil component to groundwater ingestion exposure pathway only. Analytical results for metals and cyanide are presented in Tables 3-14 through 3-16. Exceedances of Tier 1 ROs for metals were only identified in the 0 to 3 foot depth interval.

Four metals (iron, lead, manganese, and nickel) have been identified to exceed the Class I groundwater standard. The groundwater sampling results for metals and cyanide for the September 2008 sampling event are included in Table 3-17.

3.2.3.2 Cyanide

Cyanide concentrations were identified in surface soil that exceed Tier 1 ROs for the soil to groundwater exposure pathway and the soil ingestion exposure pathway. Cyanide was only identified as a COC for the 0 to 3 foot depth interval. The Tier 1 ROs are based upon the potential for exposure to amenable cyanide.

Cyanide was also identified as a COC in groundwater. Concentrations in eight monitoring wells exceed the Class I Groundwater Standard for cyanide. The eight wells are UMW-104, UMW-106, UMW-107, UMW-110, UMW-113, UMW-114, UMW-115, and UMW-121.

3.2.3.3 Polychlorinated Biphenyls

Table 3-17 presents the analytical results for groundwater samples analyzed for PCBs during the September 2008 sampling event. No PCBs were identified above method detection limits.

3.2.3.4 Pesticides

Groundwater samples were also analyzed for pesticides during the September 2008 sampling event, as presented in Table 3-18. No pesticides were identified above Class I Groundwater Standards.

3.3 Criteria for Contaminant Source and Free Product

IAC Sections 742.215, 742.220, and 742.305 require an evaluation of the potential contaminant sources and free product in soil. The following sections provide a summary of the evaluation.

3.3.1 Soil Saturation Limits

The COCs that have melting points less than 30° C were compared to the tabulated soil saturation limits listed in IAC Section 742; Appendix A; Table A. The only COCs with a melting point less than 30° C are the four BTEX compounds. All detected BTEX results were compared to the soil saturation limits. Table 3-19 presents a summary of the results for COCs that exceed the soil saturation limits. Ethylbenzene concentrations at boring B-514 exceed the soil saturation limit of 400 mg/kg. Two locations, B-506 and B-507, had toluene concentrations that exceed the soil saturation limit of 650 mg/kg. Xylene concentrations exceed the soil saturation limit of 320 mg/kg at three locations: B-506, B-507, and B-514.

3.3.2 Soil Attenuation Capacity

IAC Section 742.215 requires determination of soil attenuation capacity by evaluation of natural organic carbon fraction data, TPH data and/or total organic carbon concentration (OCC). During 1996 twelve soil samples were collected from four probeholes completed onsite and were analyzed for total organic carbon using Method 415.1. Probeholes were located near the four corners of the AmerenIP property. Three samples were collected from each location; one sample from the surface soil, one from the 3 to 10 foot interval, and one from below 10 feet. Table 3-20 presents analytical results for total organic carbon (TOC) adjusted as per IAC Section 742.215(b).

Table 3-20 also presents information on soil type for the various depth intervals. All samples collected from the one foot interval were described as fill material containing coal, cinders, etc.; therefore the default value of 6,000 mg/kg was used to evaluate potential source materials from the surface soil interval (i.e. 0-3'). The default value of 2,000 mg/kg was used to evaluate potential source materials below one meter.

TPH results and total organic carbon concentration for CSI samples were compared to these TOC values. Table 3-21 presents a summary of those samples and includes location, depth, and TPH results. Based on the results presented in Table 3-21, potential source materials are present on the site at depths ranging from 4 feet to 24 feet bgs. These samples tend to represent the central and north central area of the AmerenIP property. Potential source material was identified at ten locations.

3.3.3 Reactivity

Selected soil samples collected from locations within the impacted area were analyzed for reactive cyanide and sulfide. The soil samples results were compared to the requirements set within IAC Section 721.123. No exceedances were identified.

3.3.4 Soil pH

Soil pH analyses were performed at boring locations representative of Site conditions. The calculated average site pH level is 7.5 as reported in the CSIR. The soil sample results were compared to the range in IAC Section 742.305(d). The reported pH levels are within the requirements specified in IAC Section 742.305(d).

3.3.5 Characteristics of Toxicity for Hazardous Waste

Pursuant to 40 CFR Part 261 and the Federal Register (Volume 67, Number 49 for Wednesday, March 13, 2002) and IAC Section 721.124(a), toxicity characteristic leaching procedure (TCLP) does not apply for characterizing former MGP waste as hazardous; therefore, no TCLP analyses were completed during the CSI.

3.3.6 Polychlorinated Biphenyls in Soil

No historical evidence suggests or indicates that an electrical substation was present or that equipment or materials were stored at this site that would potentially contain polychlorinated biphenyls (PCBs). Additionally, groundwater samples collected and analyzed during 2008 did not detect PCBs in groundwater beneath the site.

4 DETAILED PATHWAY EVALUATION FOR REMEDIATION OBJECTIVES

This section discusses each of the exposure pathways presented in IAC Section 742 and corresponding property use scenarios. A summary is provided discussing which soil pathways and property use scenarios have potential exposure concerns. A concern applies to any constituent that exceeds a Tier 1 RO for any potential exposure pathway and property use scenario.

4.1 Soil Ingestion Exposure Pathway

Exceedances for the soil ingestion exposure pathway were identified at locations covering the extent of the remediation Site. The most significant levels of impact are 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. Exceedances of the soil ingestion exposure pathway are 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).

Table 3-2 presents the COCs by constituent type, depth, and potential exposure pathway. Figures 6-2 through 6-10 of the CSIR illustrate the constituents, concentrations, and depth intervals of Tier 1 Exceedances by potential exposure pathway.

4.1.1 Residential Property Use Scenarios

Eleven SVOCs (nine PAHs, dibenzofuran, 2-methylnaphthalene), and benzene have been identified as COC that exceed the Tier 1 ROs for the soil ingestion exposure pathway for residential property use scenarios. All eleven SVOCs and benzene were detected above the Tier 1 RO for deep subsurface soils. Benzene, the only BTEX constituent identified as a COC for the soil ingestion pathway for residential property use, was identified at eighteen locations.

Arsenic, cyanide, and lead have also been identified as COC for the soil ingestion pathway. Exceedances are present in surface soils. Arsenic exceedances were identified at five locations on the northern portion of the Site (Hill Street north to Site boundary) and five locations in the southwestern portion of the Site. Lead was identified in one location on the northern portion of the property in the vicinity of gas holder GH-2, and in four locations in the southwest corner of the Site in the former oil tank area. Cyanide was identified at only two locations in the southwest corner of the Site.

4.1.2 Industrial/Commercial Property Use Scenarios

Six PAH constituents and benzene have been identified as COCs that exceed the Tier 1 RO for the soil ingestion exposure pathway for industrial/commercial property use scenarios. Exceedances of all six PAH constituents are present in shallow subsurface soils. Exceedanaces of five of the six PAH constituents are present in deep subsurface soils.

Benzene, the only VOC that exceeds the Tier 1 RO for soil ingestion, is present at three locations: B-506, B-507, and B-514. The exceedances are all located in deep subsurface soils (greater than 10 feet bgs). B-506 is located in the central portion of the site within the former Hill Street right-of-way. B-507 is located just east of two former tar structures in the center portion of the Site. B-514 is located in an area north of the booster house that contained underground piping.

Arsenic and lead were also identified as COC for the soil ingestion exposure pathway in surface soils. Arsenic Tier 1 RO exceedances were detected in soil samples from ten locations; eight on the northern portion of the site near the former gas holders and tar wells, and two in the southwestern corner of the Site near the former oil tanks. Lead exceedances were identified at only two locations in the southwest corner of the Site.

4.1.3 Construction Worker Scenarios

Six PAHs have been identified as COC that exceed the Tier 1 RO for the soil ingestion pathway for construction worker exposure. The six PAHs are benzo(a)anthracene, benzo(a)pyrene, benzo(b)flouranthene, dibenzo(a,h)anthracene, dibenzofuran, and naphthalene. Exceedances of all six PAH constituents are present in deep subsurface soils. Two constituents (benzo(a)pyrene and dibenzo(a,h)anthracene) are present in shallow subsurface soils, and one constituent (benzo(a)pyrene) is present in surface soils.

Lead was also identified as a COC for the soil ingestion pathway for construction worker scenarios. Exceedances of the Tier 1 RO for lead were found in two locations in the southwest corner of the Site in surface soils.

4.2 Soil Inhalation Exposure Pathway

The following sections briefly discuss the inhalation exposure pathways by property use scenario for the AmerenIP property.

4.2.1 Residential Property Use Scenarios

Benzene, ethylbenzene, toluene, naphthalene, and xylene have been identified to exceed the Tier 1 ROs for the soil inhalation exposure pathway for residential property use in deep subsurface soils. Benzene and naphthalene are the only two COC present in surface and shallow subsurface soils. Exceedances are present on the northern portion of the property in the former main area of operations, and on the southern portion of the property adjacent to former gas holder GH-3.

No other constituents were identified as COC for the inhalation exposure pathway for residential property use.

4.2.2 Industrial/Commercial Property Use Scenarios

All four BTEX constituents and naphthalene have been identified to exceed the Tier 1 RO for the soil inhalation exposure pathway for industrial/commercial property use scenarios.

BTEX and naphthalene exceedances are present in deep subsurface soils. Benzene and naphthalene are the only two COC identified in surface and shallow subsurface soils. Exceedances are present mainly on the northern portion of the Site and in one location (B-513) in the southwest corner of the site. The exceedance at B-513 was present in surface soils only.

No other constituents were identified as COC for inhalation for industrial/commercial property use scenarios.

4.2.3 Construction Worker Scenarios

All four BTEX constituents, naphthalene, and styrene have been identified as COC for the soil inhalation pathway for construction worker exposure. Tier 1 RO exceedances are present in all three depth intervals, with all six COC present in deep subsurface soils. Exceedances are located mainly on the northern portion of the Site, with two locations (UTB-21 and B-818) to the south of gas holder GH-3 on the southern Site boundary. Mercury was also identified as a COC in surface soils in multiple boring locations; however, it is not typically associated with MGP operations.

4.3 Indoor Inhalation Exposure Pathway

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

4.4 Soil Component to Groundwater Ingestion Exposure Pathway

Eight VOCs, fourteen SVOCs, and four inorganic constituents have been identified as COC that exceed the Tier 1 ROs for the soil component to groundwater ingestion pathway. The impact extends across the entire remediation site in all depth intervals, with the most significant impact in deep subsurface soils. Constituents are identified in Table 3-2.

4.5 Groundwater Ingestion Pathway

Groundwater samples were collected from twenty-six monitoring wells on and around the Site in September, 2008. Samples were analyzed for VOCs, SVOCs, metals, PCBs, and pesticides. The analytical results are presented in Tables 3-9, 3-13, 3-17, and 3-18.

Benzene and ethylbenzene were the only VOCs to exceed Class I groundwater standards. Benzene exceedances were identified at six well locations: UMW-107, UMW-110, UMW-114, UMW-115, UMW-302, and UMW-304. Ethylbenzene exceedances were identified only in well UMW-114. Toluene concentrations exceeding the Class I groundwater standard were identified in well UMW-101 during Phase II activities; however, UMW-101 has since been abandoned. Toluene has been detected in monitoring wells UMW-107, UMW-110, UMW-114, and UMW-115 in previous sampling events; however the concentrations did not

exceed the Class I groundwater standard. Groundwater analytical results for VOCs are presented on Table 3-9.

Thirteen SVOCs have been identified as COC for groundwater. The 2008 sampling events (May, September) identified only benzo(a)anthracene, naphthalene and 2-methylnaphthalene above Class I groundwater standards. The July 2004 sampling event identified acenaphthylene, acenaphthene, and fluorene in four samples; naphthalene in three samples; anthracene, flouranthene, phenanthrene and pyrene in two samples; and benzo(a)anthracene in one sample. Groundwater analytical results for SVOCs for the September 2008 sampling event are presented on Table 3-13.

Four metals (iron, lead, manganese, nickel) and cyanide were identified as COC for groundwater. Iron concentrations exceed Class I groundwater standards in samples collected from five wells (UMW-107, UMW-110, UMW-113, UMW-114, and UMW-115). Nickel was identified at two locations, UMW-109 and UMW-116. Manganese exceedances were identified in samples from eleven wells, and cyanide exceedances were identified in samples from eight well locations. Groundwater analytical results for metals are presented on Table 3-17.

No PCBs or pesticides were identified as COC for groundwater. Groundwater analytical results for PCBs are presented on Table 3-17, and analytical results for pesticides are on Table 3-18.

Figure 4-1 illustrates the locations of the groundwater monitoring wells and the constituents that exceeded Tier 1 ROs for the most recent sampling event.

5 TIER 2 AND TIER 3 EVALUATIONS

Any soil impact greater than 10 feet below ground surface that exceeds project ROs following remedial actions will be evaluated using Tier 2 ROs. As permitted in IAC Sections 742.600 and 742.900, site-specific input parameters will be used to establish Tier 2 ROs. The Tier 2 evaluation will be utilized to estimate the potential downgradient migration of impact. If downgradient migration is determined, the potentially affected property owners will be notified.

6 PROPOSED PATHWAY EXCLUSIONS

Impact is present on the AmerenIP property that exceeds Tier 1 ROs for the soil ingestion, the soil inhalation, indoor inhalation, the soil component to groundwater ingestion, and the groundwater ingestion exposure pathways. The impact exceeds the ROs for residential property use, industrial/commercial property use, and construction worker scenarios. The following section provides a description of how the COCs for each exposure route will be addressed in order to meet the requirements for a NFR letter.

6.1 Soil Ingestion Exposure Pathway

All soil impact above the most stringent Tier 1 ROs discussed in Section 7.1 within the top 10 feet of ground surface will be addressed through soil removal and disposal. AmerenIP will then perform in-situ chemical oxidation to remediate impact deeper than 10 feet bgs that also exceeds the site remediation objectives. A Class V Injection Well Inventory Form will be submitted to the IEPA prior to the in-situ chemical oxidation activities. It is anticipated that the in-situ chemical oxidation will either completely address the impact or significantly reduce impact levels. If impact above the project ROs remains after completion of removal activities and in-situ chemical oxidation, AmerenIP will use the 10 feet of clean back fill material as an engineered barrier to exclude this pathway. A full description and discussion of the excavation areas and the in-situ chemical oxidation method will be provided in the RAP.

6.2 Soil Inhalation Exposure Pathway

All soil impact above the most stringent Tier 1 ROs discussed in Section 7.1 within the top 10 feet of ground surface will be addressed through soil removal and disposal. AmerenIP will then perform in-situ chemical oxidation to remediate impact deeper than 10 feet bgs that also exceeds the site remediation objectives. A Class V Injection Well Inventory Form will be submitted to the IEPA prior to the in-situ chemical oxidation activities. It is anticipated that the in-situ chemical oxidation will either completely address the impact or significantly reduce impact levels. If impact above the project ROs remains after completion of removal activities and in-situ chemical oxidation, AmerenIP will use the 10 feet of clean back fill material as an engineered barrier to exclude this pathway. A full description and discussion of the excavation areas and the in-situ chemical oxidation method will be provided in the RAP.

6.3 Indoor Inhalation Exposure Pathway

All soil impact above the most stringent Tier 1 ROs discussed in Section 7.1 within the top 10 feet of ground surface will be addressed through soil removal and disposal. AmerenIP will then perform in-situ chemical oxidation to remediate impact deeper than 10 feet bgs that also exceeds the site remediation objectives. A Class V Injection Well Inventory Form will be submitted to the IEPA prior to the in-situ chemical oxidation activities. It is anticipated that the in-situ chemical oxidation will either completely address the impact or significantly

reduce impact levels. If impact above the project ROs remains after completion of removal activities and in-situ chemical oxidation, AmerenIP will use the 10 feet of clean back fill material as an engineered barrier to exclude this pathway. A full description and discussion of the excavation areas and the in-situ chemical oxidation method will be provided in the RAP.

6.4 Soil Component to Groundwater Exposure Pathway

All impacted soil present at the remediation site that remains (following remedial actions) at concentrations above the Tier 1 RO for the soil component to groundwater ingestion will be addressed through Tier 2 evaluations, the use of an institutional control in the form of the groundwater ordinance, and notification(s) to the downgradient property owners.

6.5 Groundwater Ingestion Exposure Pathway

All impacted groundwater above the Tier 1 ROs will be addressed through Tier 2 evaluations, the use of an institutional control in the form of the groundwater ordinance, and notification(s) to the downgradient property owners.

6.6 Addressing Source Material

In areas where source material is present, the soil will be addressed using excavation and disposal or by in-situ chemical treatment. A Class V Injection Well Inventory Form will be submitted to the IEPA prior to the in-situ chemical oxidation activities. No source material will remain on the remediation site.

7 PROJECT REMEDIATION OBJECTIVES AND REMEDIAL MEASURES

AmerenIP has elected to remove or treat impacted soil on the remediation site to the most stringent Tier 1 ROs outlined in IAC Section 742 for any property use scenario or to the IEPA accepted background levels for metropolitan statistical areas except as follows:

- The City of Champaign is currently working on a groundwater use prohibition ordinance that will be acceptable to the IEPA. AmerenIP will not remediate any soil that exceeds a Tier 1 RO for the soil component to groundwater ingestion but is also less than a Tier 1 RO for all remaining exposure pathways and property use scenarios.

- Groundwater impact will not be addressed. The City of Champaign is currently working on a groundwater ordinance that prohibits the use of groundwater and will be acceptable to the IEPA. AmerenIP will use the ordinance as an institutional control that prevents the exposure to groundwater. AmerenIP will provide notification to potentially affected downgradient property owners. This will be based on Tier 2 ROs calculated after remedial actions have been completed utilizing post-remedial groundwater data.

7.1 Project Remediation Objectives for Soil

AmerenIP intends to perform remedial actions to address all soil impact that exceeds a Tier 1 RO for soil ingestion or soil inhalation for any property use scenario. AmerenIP will also incorporate the accepted background values for selected PAHs as permitted in IAC Section 742. To establish site remediation objectives, all Tier 1 ROs for soil inhalation and ingestion for all property use scenarios were tabulated. The more stringent of the ROs were selected as the project ROs. The project ROs are summarized in Table 7-1. These project ROs will be used as the objectives for the remedial actions.

7.2 Project Remediation Objectives for Source Material

Potential source material is present on site as discussed in Sections 3.3.2 and 6.6 of this document. AmerenIP intends to remove the material to the maximum extent practicable as stated in IAC 742.320(b). As previously stated in this report, all impact within the top 10 feet of ground surface will be addressed through soil removal and disposal; however, if source material is present below ten feet it will be excavated to the extent achievable by the excavation equipment. If source material remains after the maximum excavation depth is reached, in-situ chemical oxidation will be performed.

7.3 Project Remediation Objectives for Groundwater

Constituents are present in soil at concentrations that exceed the Tier 1 ROs for the soil component to groundwater ingestion. Constituents are also present in groundwater at

concentration exceeding Tier 1 ROs and groundwater quality standards. This potential exposure pathway will be excluded through the use of the Champaign groundwater use ordinance that prohibits the use of groundwater and the installation of potable water wells within the city limits. Tier 2 evaluations will be performed (following remedial actions) that estimate the potential downgradient migration of impact. If off-site migration is determined, the potentially affected property owners will then be identified. After receipt of the Comprehensive NFR letter, AmerenIP will notify the potentially affected parties of the possible presence or future presence of groundwater impact to their properties. The use of the Champaign ordinance should effectively exclude soil component to groundwater ingestion and the groundwater ingestion exposure pathways.

7.4 Soil Removal

All impacted soil above project ROs within the top 10 feet of ground surface will be removed, transported to a licensed disposal facility, and properly disposed. The excavated areas will be backfilled with clean fill from an off-site source. The details of the removal depths and areas are outlined in the RAP presented in conjunction with this ROR.

7.5 In-Situ Chemical Oxidation

Impacted soil above project ROs below 10 feet of ground surface will be addressed through chemical oxidation. Soil will be remediated to project ROs outlined in Section 7.1. A Class V Injection Well Inventory Form will be submitted to the IEPA prior to the in-situ chemical oxidation activities. The details of the in-situ chemical oxidation process are outlined in the RAP.

7.6 Engineered Barriers

Subsurface impact will be remediated to the project ROs outlined in Section 7.1 and listed in Table 7-1. Any soil impact greater than 10 feet bgs that remains in place and exceeds a site RO will be excluded through the use of an engineered barrier. The barrier will consist of at least 10 feet of clean soil from an off-site source.

7.7 On-Site Institutional Controls

Subsurface impact will be remediated to the project ROs outlined in Section 7.1 and listed in Table 7-1. Remediation to these ROs will require the use of institutional controls that restrict use of the property and prohibit use of the groundwater underlying the property. Any soil that remains in place that is excluded through the use of the engineered barrier will require an institutional control stating that the barrier must be maintained.

7.8 Groundwater Prohibition Ordinance

Constituents are present in soil at concentrations that exceed the Tier 1 ROs for the soil component to groundwater ingestion. Constituents are also present in groundwater at

concentrations exceeding Tier 1 ROs and groundwater quality standards. This potential exposure pathway will be excluded through the use of the Champaign groundwater use ordinance that prohibits the use of groundwater and the installation of potable water wells within the city limits. Tier 2 evaluations will be performed following remedial actions that estimate the potential downgradient migration of impact. After off-site migration is estimated, the potentially affected property owners will then be identified. After receipt of the Comprehensive NFR letter, AmerenIP will notify the potentially affected parties of the possible presence or future presence of groundwater impact to their properties. The use of the Champaign ordinance should effectively exclude soil component to groundwater ingestion and the groundwater ingestion exposure pathways.

7.9 Highway Authority Agreements

Subsurface impact will be remediated to the project ROs outlined in Section 7.1. Remediation to these ROs will not require the use of HAAs.

7.10 Technical and Practical Feasibility

The selected approaches for addressing the soil and groundwater impact at the remediation site are both technically and practically feasible. Soil remediation through excavation/disposal and in-situ chemical oxidation are accepted methods and can readily achieve the remediation objectives of addressing impact to the most stringent ROs.

8 SUMMARY AND CONCLUSIONS

Subsurface soil and groundwater impact is present on the AmerenIP property located at 308 North 5th Street in Champaign, Illinois. The remediation site is depicted in Figure 1-2.

Subsurface soil and groundwater impact will be addressed to meet the requirements for No Further Remediation as outlined in IAC Section 742. The project ROs established are the most stringent Tier 1 ROs for any property use scenario or IEPA accepted background levels for metropolitan statistical areas as outlined in IAC Section 742. All impact within the top 10 feet of ground surface that exceeds project ROs will be removed and properly disposed. Areas containing source material will be excavated to the maximum extent achievable by the excavation equipment. In-situ chemical oxidation will be used to address impact deeper than 10 feet. If required, an engineered barrier in the form of 10 feet of clean soil will be used to exclude the ingestion and/or inhalation pathways. Tier 2 evaluations will be calculated for the soil and compared to groundwater and groundwater ingestion pathways following remedial actions. The Tier 2 evaluations will be performed to identify the projected downgradient migration in groundwater and potentially affected property owners. An IEPA approved groundwater ordinance will be used to exclude the groundwater ingestion pathway.

The implementation of the proposed remedial actions in conjunction with necessary barriers and controls will exclude all potential exposure pathways. AmerenIP will have met the requirements for a comprehensive NFR letter for this remediation site.

9 ILLINOIS LICENSED PROFESSIONAL ENGINEER REVIEW

For those portions of the work performed before my involvement:

I have reviewed documentation of the prior investigation activities and believe the documentation is suitable for compliance with 35 Ill. Adm. Code 740.

For those portions of the work performed during my involvement:

I attest that all site investigation activities performed during my involvement were performed with my input and direction and that this document and all attachments were prepared under my direction or reviewed by me; and, to the best of my knowledge and belief, the work described in this report has been completed in accordance with 35 Ill. Adm. Code 740, developed in conjunction with the use of accepted engineering standards, and the information presented is accurate and complete.

Signature: _____

Derek D. Ingram, P.E.
Licensed Professional Engineer

Date: _____

License No.: _____

License Expiration Date: _____

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TABLE ES-1
MANUFACTURED GAS PLANT RELATED CONSTITUENTS OF CONCERN
REMEDIAL OBJECTIVES REPORT
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

SOIL	***GROUNDWATER***
Inorganics	**Inorganics**
Cyanide	Cyanide
Metals	**Metals**
Chromium	Iron
Lead	Lead
Arsenic	Nickel
Mercury	Manganese
Volatile Aromatics	**Volatile Aromatics**
Benzene	Benzene
Ethylbenzene	Ethylbenzene
Toluene	Toluene
Total Xylenes	
Styrene	
Acetone	
Methylene Chloride	
Polycylic Aromatic Hydrocarbons	**Polycylic Aromatic Hydrocarbons**
Acenaphthene	Acenaphthene
Acenaphthylene	Acenaphthylene
Benzo(a)anthracene	Benzo(a)anthracene
Benzo(a)pyrene	Benzo(a)pyrene
Benzo(b)fluoranthene	Benzo(b)fluoranthene
Benzo(k)fluoranthene	Chrysene
Chrysene	Fluoranthene
Dibenzo (a,h,)anthracene	Fluorene
Dibenzofuran	Naphthalene
Fluorene	Phenanthrene
Indeno(1,2,3,cd)pyrene	Pyrene
Naphthalene	2-methylnaphthalene
Phenanthrene	
2-methylnaphthalene	

TABLE 3-1
MANUFACTURED GAS PLANT RELATED CONSTITUENTS OF CONCERN
REMEDIAL OBJECTIVES REPORT
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

SOIL	***GROUNDWATER***
Inorganics	**Inorganics**
Cyanide	Cyanide
Metals	**Metals**
Chromium	Iron
Lead	Lead
Arsenic	Nickel
Mercury	Manganese
Volatile Aromatics	**Volatile Aromatics**
Benzene	Benzene
Ethylbenzene	Ethylbenzene
Toluene	Toluene
Total Xylenes	
Styrene	
Acetone	
Methylene Chloride	
Polycylic Aromatic Hydrocarbons	**Polycylic Aromatic Hydrocarbons**
Acenaphthene	Acenaphthene
Acenaphthylene	Acenaphthylene
Benzo(a)anthracene	Benzo(a)anthracene
Benzo(a)pyrene	Benzo(a)pyrene
Benzo(b)fluoranthene	Benzo(b)fluoranthene
Benzo(k)fluoranthene	Chrysene
Chrysene	Fluoranthene
Dibenzo (a,h,)anthracene	Fluorene
Dibenzofuran	Naphthalene
Fluorene	Phenanthrene
Indeno(1,2,3,cd)pyrene	Pyrene
Naphthalene	2-methylnaphthalene
Phenanthrene	
2-methylnaphthalene	

TABLE 3-2
SUMMARY OF CONSTITUENTS OF CONCERN FOR SOIL BY EXPOSURE PATHWAY
CHAMPAIGN MGP SITE
AMERENIP

Depth (Feet)	Constituent Type	SOIL INGESTION			SOIL INHALATION			INDOOR INHALATION		Soil Component to Groundwater Ingestion
		Residential	Industrial/ Commercial	Construction	Residential	Industrial/ Commercial	Construction	Residential	Industrial/ Commercial	
0 - 3	*BTEX / VOCs*	benzene	------	------	benzene	benzene	benzene ethylbenzene xylene	benzene xylene	benzene	benzene ethylbenzene
	PNAs / SVOCs	benzo(a)anthracene benzo(a)pyrene benzo(b)fluoranthene dibenzo(a,h)anthracene indeno(1,2,3-cd)pyrene benzo(k)fluoranthene	benzo(a)anthracene benzo(a)pyrene benzo(b)fluoranthene dibenzo(a,h)anthracene indeno(1,2,3-cd)pyrene	benzo(a)pyrene	naphthalene	naphthalene	naphthalene	naphthalene	naphthalene	benzo(a)anthracene benzo(a)pyrene benzo(b)fluoranthene acenaphthylene dibenzo(a,h)anthracene indeno(1,2,3-cd)pyrene naphthalene phenanthrene
	Inorganics	arsenic lead cyanide	arsenic lead	lead	------	------	mercury	mercury	mercury	arsenic lead chromium cyanide
3 - 10	*BTEX / VOCs*	benzene	------	------	benzene	benzene	benzene ethylbenzne toluene xylene	benzene ethylbenzne xylene	benzene ethylbenzne xylene	benzene ethylbenzne toluene methylene chloride
	PNAs / SVOCs	benzo(a)anthracene benzo(a)pyrene benzo(b)fluoranthene benzo(k)fluoranthene chrysene dibenzo(a,h)anthracene indeno(1,2,3-cd)pyrene naphthalene	benzo(a)anthracene benzo(a)pyrene benzo(b)fluoranthene dibenzo(a,h)anthracene indeno(1,2,3-cd)pyrene benzo(k)fluoranthene	benzo(a)pyrene dibenzo(a,h)anthracene	naphthalene	naphthalene	naphthalene	2-methylnaphthalene naphthalene	2-methylnaphthalene naphthalene	acenaphthene acenaphthylene benzo(a)anthracene benzo(a)pyrene benzo(b)fluoranthene benzo(k)fluoranthene dibenzo(a,h)anthracene indeno(1,2,3-cd)pyrene naphthalene phenanthrene 2-methylnaphthalene dibenzofuran
	Inorganics	------	------	------	------	------	------	------	------	------
Greater than 10	*BTEX / VOCs*	benzene	benzene	------	benzene ethylbenzene toluene xylene	benzene ethylbenzene toluene xylene	benzene ethylbenzene toluene xylene styrene	benzene ethylbenzene toluene xylene styrene	benzene ethylbenzene toluene xylene styrene	benzene ethylbenzene toluene xylene acetone methylene chloride styrene
	PNAs / SVOCs	benzo(a)anthracene benzo(a)pyrene benzo(b)fluoranthene dibenzo(a,h)anthracene indeno(1,2,3-cd)pyrene benzo(k)fluoranthene chrysene naphthalene phenanthrene dibenzofuran 2-methylnaphthalene	benzo(a)anthracene benzo(a)pyrene benzo(b)fluoranthene dibenzo(a,h)anthracene indeno(1,2,3-cd)pyrene	benzo(a)anthracene benzo(a)pyrene benzo(b)fluoranthene dibenzo(a,h)anthracene dibenzofuran naphthalene	naphthalene	naphthalene	naphthalene	2-methylnaphthalene naphthalene	2-methylnaphthalene naphthalene	acenaphthylene acenaphthene benzo(a)anthracene benzo(a)pyrene benzo(b)fluoranthene benzo(k)fluoranthene dibenzo(a,h)anthracene indeno(1,2,3-cd)pyrene naphthalene phenanthrene chrysene fluorene 2-methylnaphthalene dibenzofuran
	Inorganics	------	------	------	------	------	------	------	------	------

TABLE 3-3
TIER 1 COMPARISON - BTEX AND PAH RESULTS FOR 0 TO 3 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remedial Objectives - Soil														
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to GW	*MSA Background* Metropolitan		B-814	B-816	B-818	B-822	B-823
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)	Areas	UNITS	B814 (0.0-2.0') 4/1/2008 0.0-2.0'	B816 (1.0-2.0') 4/1/2008 1.0-2.0'	B818 (2.0-3.0') 4/1/2008 2.0-3.0'	B822 (1.0-3.0') 4/1/2008 1.0-3.0'	B823 (3.0-4.0') 4/1/2008 3.0-4.0'
Benzene	12	100	2,300	0.80	1.6	2.2	0.069	0.51	0.03	--	(mg/kg)	<0.0019	<0.0015	0.0183	<0.0012	0.0014
Ethylbenzene	7,800	200,000	20,000	400	400	58.0	130.0	130.0	13.0	--	(mg/kg)	<0.0093	0.0027	<0.0063	<0.0058	0.0068
Toluene	16,000	410,000	410,000	650	650	42.0	240.0	240.0	12.0	--	(mg/kg)	<0.0093	0.0034	0.0025	<0.0058	0.0014
Xylene (total)	16,000	410,000	41,000	410	320	5.6	63.0	100.0	150.0	--	(mg/kg)	<0.0093	0.0022	<0.0063	<0.0058	0.0026
Acenaphthene	4,700	120,000	120,000	-----	-----	-----	-----	-----	570	0.130	(mg/kg)	<0.063	<0.009	<0.422	<0.004	<0.005
Acenaphthylene	2,300(1)	61,000	61,000	-----	-----	-----	-----	-----	24.0(1)	0.070	(mg/kg)	0.823	0.086	6.48	0.188	0.045
Anthracene	23,000	610,000	610,000	-----	-----	-----	-----	-----	12,000	0.40	(mg/kg)	0.188	0.031	0.711	0.011	0.01
Benzo(a)anthracene	0.90	8.0	170.0	-----	-----	-----	-----	-----	2.0	1.80	(mg/kg)	0.770	0.086	4.13	0.016	0.057
Benzo(a)pyrene	0.09	0.80	17.0	-----	-----	-----	-----	-----	8.0	2.1	(mg/kg)	1.09	0.108	11.2	0.026	0.067
Benzo(b)fluoranthene	0.90	8.0	170.0	-----	-----	-----	-----	-----	5.0	2.1	(mg/kg)	1.55	0.157	9.29	0.052	0.065
Benzo(ghi)perylene	2,300(1)	61,000	61,000	-----	-----	-----	-----	-----	32,000(1)	1.7	(mg/kg)	1.04	0.124	8.03	0.051	0.059
Benzo(k)fluoranthene	9.0	78	1,700	-----	-----	-----	-----	-----	49	1.7	(mg/kg)	0.491	0.051	2.70	0.015	0.06
Chrysene	88.0	780	17,000	-----	-----	-----	-----	-----	160	2.7	(mg/kg)	1.08	0.121	4.95	0.016	0.058
Dibenzo(a,h)anthracene	0.09	0.8	17.0	-----	-----	-----	-----	-----	2.0	0.420	(mg/kg)	0.244	0.028	1.83	0.014	0.018
Fluoranthene	3,100	82,000	82,000	-----	-----	-----	-----	-----	4,300	4.10	(mg/kg)	1.15	0.139	3.18	0.017	0.063
Fluorene	3,100	82,000	82,000	-----	-----	-----	-----	-----	560	0.180	(mg/kg)	0.081	0.009	0.39	0.007	<0.005
Indeno(1,2,3-cd)pyrene	0.90	8.0	170.0	-----	-----	-----	-----	-----	14.0	1.60	(mg/kg)	0.828	0.098	5.95	0.043	0.057
Naphthalene	1,600	41,000	4,100	170	270	1.8	34.0	34.0	12.0	0.20	(mg/kg)	0.077	0.014	0.815	0.010	0.008
Phenanthrene	2,300(1)	61,000	61,000	-----	-----	-----	-----	-----	220(1)	2.5	(mg/kg)	0.549	0.088	0.881	0.011	0.032
Pyrene	2,300	61,000	61,000	-----	-----	-----	-----	-----	4,200	3.0	(mg/kg)	1.57	0.175	6.85	0.027	0.072

Notes:
- mg/kg — Milligrams per kilogram
- (1) — Provisional remediation objective provided by IEPA
- ----- — No remediation objective has been established by the IEPA for this constitiuent for this exposure route
- <12 — Not detected at the level identified
- Analytical result exceeds one or more Tier 1 RO.

TABLE 3-3
TIER 1 COMPARISON - BTEX AND PAH RESULTS FOR 0 TO 3 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remedial Objectives - Soil														
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to GW	*MSA Background* Metropolitan		B-827 B827 (2.0-3.0') 4/2/2008	B-829 B829 (2.0-3.0') 4/2/2008	B-833 B833 (2.0-3.0') 4/2/2008	B-501 B-501-2 7/13/2004	B-502 B-502-3 7/13/2004
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)	Areas	UNITS	2.0-3.0'	2.0-3.0'	2.0-3.0'	1'-2'	2'-3'
Benzene	12	100	2,300	0.80	1.6	2.2	0.069	0.51	0.03	--	(mg/kg)	<0.0016	0.0533	0.017	0.0019	0.0034
Ethylbenzene	7,800	200,000	20,000	400	400	58.0	130.0	130.0	13.0	--	(mg/kg)	<0.008	0.0013	<0.006	<0.0053	0.0021
Toluene	16,000	410,000	410,000	650	650	42.0	240.0	240.0	12.0	--	(mg/kg)	<0.008	0.0028	0.0025	<0.0053	0.0055
Xylene (total)	16,000	410,000	41,000	410	320	5.6	63.0	100.0	150.0	--	(mg/kg)	<0.008	0.006	0.0021	<0.0053	0.0065
Acenaphthene	4,700	120,000	120,000	-----	-----	-----	-----	-----	570	0.130	(mg/kg)	<0.004	0.189	<0.402	<0.124	<0.290
Acenaphthylene	2,300(1)	61,000	61,000	-----	-----	-----	-----	-----	24.0(1)	0.070	(mg/kg)	0.010	0.318	4.15	0.078	0.034
Anthracene	23,000	610,000	610,000	-----	-----	-----	-----	-----	12,000	0.40	(mg/kg)	0.009	0.331	1.59	0.041	<0.290
Benzo(a)anthracene	0.90	8.0	170.0	-----	-----	-----	-----	-----	2.0	1.80	(mg/kg)	0.033	2.16	5.10	0.272	0.11
Benzo(a)pyrene	0.09	0.80	17.0	-----	-----	-----	-----	-----	8.0	2.1	(mg/kg)	0.026	2.25	8.10	0.365	0.16
Benzo(b)fluoranthene	0.90	8.0	170.0	-----	-----	-----	-----	-----	5.0	2.1	(mg/kg)	0.026	2.80	9.26	0.491	0.23
Benzo(ghi)perylene	2,300(1)	61,000	61,000	-----	-----	-----	-----	-----	32,000(1)	1.7	(mg/kg)	0.016	1.29	7.21	0.210	0.12
Benzo(k)fluoranthene	9.0	78	1,700	-----	-----	-----	-----	-----	49	1.7	(mg/kg)	0.028	1.11	2.63	0.189	0.084
Chrysene	88.0	780	17,000	-----	-----	-----	-----	-----	160	2.7	(mg/kg)	0.034	2.12	6.02	0.323	0.12
Dibenzo(a,h)anthracene	0.09	0.8	17.0	-----	-----	-----	-----	-----	2.0	0.420	(mg/kg)	0.007	0.422	1.39	0.061	<0.290
Fluoranthene	3,100	82,000	82,000	-----	-----	-----	-----	-----	4,300	4.10	(mg/kg)	0.054	2.92	7.53	0.445	0.11
Fluorene	3,100	82,000	82,000	-----	-----	-----	-----	-----	560	0.180	(mg/kg)	<0.004	0.172	0.528	<0.124	<0.290
Indeno(1,2,3-cd)pyrene	0.90	8.0	170.0	-----	-----	-----	-----	-----	14.0	1.60	(mg/kg)	0.016	1.28	5.23	0.238	0.084
Naphthalene	1,600	41,000	4,100	170	270	1.8	34.0	34.0	12.0	0.20	(mg/kg)	<0.004	0.074	0.37	0.033	0.12
Phenanthrene	2,300(1)	61,000	61,000	-----	-----	-----	-----	-----	220(1)	2.5	(mg/kg)	0.035	1.16	3.80	0.172	0.078
Pyrene	2,300	61,000	61,000	-----	-----	-----	-----	-----	4,200	3.0	(mg/kg)	0.049	2.69	12.3	0.439	0.14

Notes:	mg/kg	Milligrams per kilogram
	(1)	Provisional remediation objective provided by IEPA
	-----	No remediation objective has been established by the IEPA for this constitiuent for this exposure route
	<12	Not detected at the level identified
		Analytical result exceeds one or more Tier 1 RO.

TABLE 3-3
TIER 1 COMPARISON - BTEX AND PAH RESULTS FOR 0 TO 3 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remedial Objectives - Soil											B-503	B-504	B-505	B-506	B-507	B-508
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to GW	*MSA Background* Metropolitan		B-503-3	B-504-3	B-505-3	B-506-3	B-507-1	B-508-3
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)	Areas	UNITS	7/13/2004 2'-3'	7/13/2004 2'-3'	7/14/2004 2'-3'	7/22/2004 2'-3'	7/21/2004 0-1'	7/19/2004 2'-3'
Benzene	12	100	2,300	0.80	1.6	2.2	0.069	0.51	0.03	--	(mg/kg)	13.9	0.0877	0.0477	3.82	0.005	0.0282
Ethylbenzene	7,800	200,000	20,000	400	400	58.0	130.0	130.0	13.0	--	(mg/kg)	4.24	0.0321	0.149	1.39	0.0011	0.0018
Toluene	16,000	410,000	410,000	650	650	42.0	240.0	240.0	12.0	--	(mg/kg)	6.28	0.0383	0.0313	3.32	0.0039	0.0071
Xylene (total)	16,000	410,000	41,000	410	320	5.6	63.0	100.0	150.0	--	(mg/kg)	9.92	0.0653	0.139	5.48	0.0032	0.0063
Acenaphthene	4,700	120,000	120,000	-----	-----	-----	-----	-----	570	0.130	(mg/kg)	<132.0	0.613	6.9	1.3	0.11	0.39
Acenaphthylene	2,300(1)	61,000	61,000	-----	-----	-----	-----	-----	24.0(1)	0.070	(mg/kg)	<132.0	0.152	70.0	18.3	1.05	5.39
Anthracene	23,000	610,000	610,000	-----	-----	-----	-----	-----	12,000	0.40	(mg/kg)	51.0	0.458	15.0	4.54	0.512	1.7
Benzo(a)anthracene	0.90	8.0	170.0	-----	-----	-----	-----	-----	2.0	1.80	(mg/kg)	69.0	0.251	44.9	17.6	0.951	5.92
Benzo(a)pyrene	0.09	0.80	17.0	-----	-----	-----	-----	-----	8.0	2.1	(mg/kg)	67.0	0.193	137.0	49.10	1.97	23.0
Benzo(b)fluoranthene	0.90	8.0	170.0	-----	-----	-----	-----	-----	5.0	2.1	(mg/kg)	76.0	0.21	123.0	55.5	1.73	18.6
Benzo(ghi)perylene	2,300(1)	61,000	61,000	-----	-----	-----	-----	-----	32,000(1)	1.7	(mg/kg)	<132.0	0.064	38.4	17.1	0.651	7.35
Benzo(k)fluoranthene	9.0	78	1,700	-----	-----	-----	-----	-----	49	1.7	(mg/kg)	<132.0	0.086	33.0	16.50	0.528	4.47
Chrysene	88.0	780	17,000	-----	-----	-----	-----	-----	160	2.7	(mg/kg)	62.0	0.242	46.8	23.1	1.09	8.09
Dibenzo(a,h)anthracene	0.09	0.8	17.0	-----	-----	-----	-----	-----	2.0	0.420	(mg/kg)	<132.0	0.025	13.0	5.15	0.17	1.8
Fluoranthene	3,100	82,000	82,000	-----	-----	-----	-----	-----	4,300	4.10	(mg/kg)	120.0	0.678	37.2	18.0	1.49	8.15
Fluorene	3,100	82,000	82,000	-----	-----	-----	-----	-----	560	0.180	(mg/kg)	<132.0	0.428	9.9	2.80	0.25	0.75
Indeno(1,2,3-cd)pyrene	0.90	8.0	170.0	-----	-----	-----	-----	-----	14.0	1.60	(mg/kg)	<132.0	0.081	41.2	16.7	0.611	6.28
Naphthalene	1,600	41,000	4,100	170	270	1.8	34.0	34.0	12.0	0.20	(mg/kg)	71.0	6.79	21.0	11.40	0.599	1.2
Phenanthrene	2,300(1)	61,000	61,000	-----	-----	-----	-----	-----	220(1)	2.5	(mg/kg)	130	1.14	18.0	10.2	1.76	2.9
Pyrene	2,300	61,000	61,000	-----	-----	-----	-----	-----	4,200	3.0	(mg/kg)	110	0.524	96.2	30.2	2.33	16.3

Notes:

mg/kg	Milligrams per kilogram
(1)	Provisional remediation objective provided by IEPA
-----	No remediation objective has been established by the IEPA for this constituent for this exposure route
<12	Not detected at the level identified
	Analytical result exceeds one or more Tier 1 RO.

TABLE 3-3
TIER 1 COMPARISON - BTEX AND PAH RESULTS FOR 0 TO 3 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remedial Objectives - Soil											B-509	B-510	B-512	B-513	B-514	B-515
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to GW	*MSA Background* Metropolitan		B-509-3	B-510-2	B-512-3	B-513-2	B-514-3	B-515-2
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)	Areas	UNITS	7/21/2004 2'-3'	7/12/2004 1'-2'	7/12/2004 2'-3'	7/12/2004 1'-2'	7/22/2004 2'-3'	7/16/2004 1'-2'
Benzene	12	100	2,300	0.80	1.6	2.2	0.069	0.51	0.03	--	(mg/kg)	0.0142	0.0312	0.0083	0.0076	0.0326	0.0043
Ethylbenzene	7,800	200,000	20,000	400	400	58.0	130.0	130.0	13.0	--	(mg/kg)	0.004	0.0022	0.0013	<0.0054	0.0174	0.0213
Toluene	16,000	410,000	410,000	650	650	42.0	240.0	240.0	12.0	--	(mg/kg)	0.0112	0.0076	0.0049	0.0032	0.0103	0.003
Xylene (total)	16,000	410,000	41,000	410	320	5.6	63.0	100.0	150.0	--	(mg/kg)	0.0112	0.0081	0.0038	0.0018	0.0254	0.0264
Acenaphthene	4,700	120,000	120,000	-----	-----	-----	-----	-----	570	0.130	(mg/kg)	<1.18	<6.89	0.33	0.052	<5.59	1.14
Acenaphthylene	2,300(1)	61,000	61,000	-----	-----	-----	-----	-----	24.0(1)	0.070	(mg/kg)	1.18	<6.89	1.23	0.10	2.6	1.93
Anthracene	23,000	610,000	610,000	-----	-----	-----	-----	-----	12,000	0.40	(mg/kg)	0.33	<6.89	1.74	0.221	2.4	1.03
Benzo(a)anthracene	0.90	8.0	170.0	-----	-----	-----	-----	-----	2.0	1.80	(mg/kg)	1.47	2.9	2.87	0.803	4.6	2.2
Benzo(a)pyrene	0.09	0.80	17.0	-----	-----	-----	-----	-----	8.0	2.1	(mg/kg)	3.31	3.2	2.94	0.821	5.86	4.01
Benzo(b)fluoranthene	0.90	8.0	170.0	-----	-----	-----	-----	-----	5.0	2.1	(mg/kg)	3.46	4.5	4.31	1.33	7.59	4.45
Benzo(ghi)perylene	2,300(1)	61,000	61,000	-----	-----	-----	-----	-----	32,000(1)	1.7	(mg/kg)	1.65	<6.89	1.34	0.307	3.8	1.28
Benzo(k)fluoranthene	9.0	78	1,700	-----	-----	-----	-----	-----	49	1.7	(mg/kg)	1.0	<6.89	1.50	0.492	2.7	1.31
Chrysene	88.0	780	17,000	-----	-----	-----	-----	-----	160	2.7	(mg/kg)	2.02	3.6	3.23	0.934	4.9	2.75
Dibenzo(a,h)anthracene	0.09	0.8	17.0	-----	-----	-----	-----	-----	2.0	0.420	(mg/kg)	0.41	<6.89	0.43	0.12	<5.59	0.35
Fluoranthene	3,100	82,000	82,000	-----	-----	-----	-----	-----	4,300	4.10	(mg/kg)	2.03	3.7	7.83	1.70	6.3	3.29
Fluorene	3,100	82,000	82,000	-----	-----	-----	-----	-----	560	0.180	(mg/kg)	0.12	<6.89	1.07	0.051	1.9	0.717
Indeno(1,2,3-cd)pyrene	0.90	8.0	170.0	-----	-----	-----	-----	-----	14.0	1.60	(mg/kg)	1.40	<6.89	1.62	0.404	3.4	1.23
Naphthalene	1,600	41,000	4,100	170	270	1.8	34.0	34.0	12.0	0.20	(mg/kg)	0.29	<6.89	0.58	0.052	<5.59	1.82
Phenanthrene	2,300(1)	61,000	61,000	-----	-----	-----	-----	-----	220(1)	2.5	(mg/kg)	0.82	2.0	5.99	0.837	6.52	3.32
Pyrene	2,300	61,000	61,000	-----	-----	-----	-----	-----	4,200	3.0	(mg/kg)	3.12	5.8	6.02	1.34	8.53	5.74

Notes:

mg/kg	Milligrams per kilogram
(1)	Provisional remediation objective provided by IEPA
-----	No remediation objective has been established by the IEPA for this constituent for this exposure route
<12	Not detected at the level identified
	Analytical result exceeds one or more Tier 1 RO.

TABLE 3-3
TIER 1 COMPARISON - BTEX AND PAH RESULTS FOR 0 TO 3 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remedial Objectives - Soil								Soil Component to GW (Class I)	*MSA Background* Metropolitan Areas	UNITS	B-516 B-516-3 7/22/2004 2'-3'	B-550 B-550-3 7/20/2004 2'-3'	B-551 B-551-3 7/15/2004 2'-3'	B-553 B-553-3 7/14/2004 2'-3'	B-554 B-554-3 7/15/2004 2'-3'	B-556 B-556-3 7/20/2004 2'-3'
		Ingestion			*Inhalation*		*Indoor Inhalation*										
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial									
Benzene	12	100	2,300	0.80	1.6	2.2	0.069	0.51	0.03	--	(mg/kg)	0.0051	0.0058	0.972	0.195	0.180	0.0103
Ethylbenzene	7,800	200,000	20,000	400	400	58.0	130.0	130.0	13.0	--	(mg/kg)	0.0054	0.0136	0.282	0.200	0.256	0.0115
Toluene	16,000	410,000	410,000	650	650	42.0	240.0	240.0	12.0	--	(mg/kg)	0.0045	0.0038	0.244	0.370	0.211	0.0262
Xylene (total)	16,000	410,000	41,000	410	320	5.6	63.0	100.0	150.0	--	(mg/kg)	0.0065	0.0259	0.276	0.456	0.624	0.0416
Acenaphthene	4,700	120,000	120,000	-----	-----	-----	-----	-----	570	0.130	(mg/kg)	<18.10	<34.5	3.7	8.53	<9.02	1.4
Acenaphthylene	2,300(1)	61,000	61,000	-----	-----	-----	-----	-----	24.0(1)	0.070	(mg/kg)	40.1	<34.5	14.2	26.4	9.15	5.9
Anthracene	23,000	610,000	610,000	-----	-----	-----	-----	-----	12,000	0.40	(mg/kg)	9.7	<34.5	20.2	8.45	<9.02	4.44
Benzo(a)anthracene	0.90	8.0	170.0	-----	-----	-----	-----	-----	2.0	1.80	(mg/kg)	42.2	<34.5	51.70	10.30	<9.02	6.39
Benzo(a)pyrene	0.09	0.80	17.0	-----	-----	-----	-----	-----	8.0	2.1	(mg/kg)	119.0	<34.5	67.50	54.90	8.5	17.7
Benzo(b)fluoranthene	0.90	8.0	170.0	-----	-----	-----	-----	-----	5.0	2.1	(mg/kg)	130.0	<34.5	83.20	50.30	8.2	13.4
Benzo(ghi)perylene	2,300(1)	61,000	61,000	-----	-----	-----	-----	-----	32,000(1)	1.7	(mg/kg)	50.40	<34.5	28.0	25.60	8.5	6.11
Benzo(k)fluoranthene	9.0	78	1,700	-----	-----	-----	-----	-----	49	1.7	(mg/kg)	36.40	<34.5	25.0	11.60	<9.02	3.67
Chrysene	88.0	780	17,000	-----	-----	-----	-----	-----	160	2.7	(mg/kg)	62.3	<34.5	51.2	18.20	4.3	7.88
Dibenzo(a,h)anthracene	0.09	0.8	17.0	-----	-----	-----	-----	-----	2.0	0.420	(mg/kg)	14.0	<34.5	9.0	5.0	<9.02	1.5
Fluoranthene	3,100	82,000	82,000	-----	-----	-----	-----	-----	4,300	4.10	(mg/kg)	27.2	19.0	93.0	17.40	4.6	9.16
Fluorene	3,100	82,000	82,000	-----	-----	-----	-----	-----	560	0.180	(mg/kg)	4.0	12.0	7.06	7.8	<9.02	3.91
Indeno(1,2,3-cd)pyrene	0.90	8.0	170.0	-----	-----	-----	-----	-----	14.0	1.60	(mg/kg)	46.9	<34.5	32.80	21.10	4.4	5.29
Naphthalene	1,600	41,000	4,100	170	270	1.8	34.0	34.0	12.0	0.20	(mg/kg)	10.0	<34.5	8.45	2.20	<9.02	5.27
Phenanthrene	2,300(1)	61,000	61,000	-----	-----	-----	-----	-----	220(1)	2.5	(mg/kg)	8.7	14.0	46.8	9.37	3.3	9.93
Pyrene	2,300	61,000	61,000	-----	-----	-----	-----	-----	4,200	3.0	(mg/kg)	66.70	21.0	76.4	26.8	8.5	18.30

Notes:

mg/kg	Milligrams per kilogram
(1)	Provisional remediation objective provided by IEPA
-----	No remediation objective has been established by the IEPA for this constituent for this exposure route
<12	Not detected at the level identified
	Analytical result exceeds one or more Tier 1 RO.

TABLE 3-3
TIER 1 COMPARISON - BTEX AND PAH RESULTS FOR 0 TO 3 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remedial Objectives - Soil																
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to GW	*MSA Background* Metropolitan		B-557 B-557-1 7/20/2004	CSS-3 12/18/1990	CSS-4 12/18/1990	CSS-5 12/19/1990	TP-503 TP-503-3 7/8/2004	TP-504 TP-504-3 7/8/2004
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)	Areas	UNITS	0-1'	0-6"	0-6"	0-6"	3'	3'
Benzene	12	100	2,300	0.80	1.6	2.2	0.069	0.51	0.03	--	(mg/kg)	0.0053	<0.310	---	---	14.5	10.5
Ethylbenzene	7,800	200,000	20,000	400	400	58.0	130.0	130.0	13.0	--	(mg/kg)	0.0021	<0.310	---	---	45.6	74.0
Toluene	16,000	410,000	410,000	650	650	42.0	240.0	240.0	12.0	--	(mg/kg)	0.0036	<0.310	0.41	<0.310	1.43	3.87
Xylene (total)	16,000	410,000	41,000	410	320	5.6	63.0	100.0	150.0	--	(mg/kg)	0.0052	<0.310	0.66	<0.310	42.4	91.7
Acenaphthene	4,700	120,000	120,000	-----	-----	-----	-----	-----	570	0.130	(mg/kg)	0.17	<0.330	0.47	<0.005	150.0	15.0
Acenaphthylene	2,300(1)	61,000	61,000	-----	-----	-----	-----	-----	24.0(1)	0.070	(mg/kg)	0.876	1.9	3.3	<0.008	130.0	28.0
Anthracene	23,000	610,000	610,000	-----	-----	-----	-----	-----	12,000	0.40	(mg/kg)	0.616	1.0	2.2	0.009	90.0	14.0
Benzo(a)anthracene	0.90	8.0	170.0	-----	-----	-----	-----	-----	2.0	1.80	(mg/kg)	3.55	3.6	9.7	0.099	40.0	9.6
Benzo(a)pyrene	0.09	0.80	17.0	-----	-----	-----	-----	-----	8.0	2.1	(mg/kg)	5.24	2.8	10.0	0.039	37.0	10.0
Benzo(b)fluoranthene	0.90	8.0	170.0	-----	-----	-----	-----	-----	5.0	2.1	(mg/kg)	6.0	6.1	13.0	0.15	21.0	4.8
Benzo(ghi)perylene	2,300(1)	61,000	61,000	-----	-----	-----	-----	-----	32,000(1)	1.7	(mg/kg)	2.66	3.2	9.9	0.1	11.0	2.8
Benzo(k)fluoranthene	9.0	78	1,700	-----	-----	-----	-----	-----	49	1.7	(mg/kg)	1.9	1.6	4.2	0.14	13.0	2.5
Chrysene	88.0	780	17,000	-----	-----	-----	-----	-----	160	2.7	(mg/kg)	3.82	3.2	8.1	0.16	48.0	11.0
Dibenzo(a,h)anthracene	0.09	0.8	17.0	-----	-----	-----	-----	-----	2.0	0.420	(mg/kg)	0.72	0.53	2.6	0.017	8.5	2.1
Fluoranthene	3,100	82,000	82,000	-----	-----	-----	-----	-----	4,300	4.10	(mg/kg)	6.31	3.3	9.9	0.24	220.0	50.0
Fluorene	3,100	82,000	82,000	-----	-----	-----	-----	-----	560	0.180	(mg/kg)	0.11	0.3	0.4	<0.0006	130.0	22.0
Indeno(1,2,3-cd)pyrene	0.90	8.0	170.0	-----	-----	-----	-----	-----	14.0	1.60	(mg/kg)	2.53	2.9	9.9	0.13	11.0	2.7
Naphthalene	1,600	41,000	4,100	170	270	1.8	34.0	34.0	12.0	0.20	(mg/kg)	0.982	0.33	0.47	<0.005	590.0	83.0
Phenanthrene	2,300(1)	61,000	61,000	-----	-----	-----	-----	-----	220(1)	2.5	(mg/kg)	2.83	2.2	3.7	0.083	340.0	72.0
Pyrene	2,300	61,000	61,000	-----	-----	-----	-----	-----	4,200	3.0	(mg/kg)	6.02	5.3	15.0	0.25	120.0	32.0

Notes:

mg/kg	Milligrams per kilogram
(1)	Provisional remediation objective provided by IEPA
-----	No remediation objective has been established by the IEPA for this constituent for this exposure route
<12	Not detected at the level identified
	Analytical result exceeds one or more Tier 1 RO.

TABLE 3-4
TIER 1 COMPARISON - BTEX AND PAH RESULTS FOR 3 TO 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remedial Objectives - Soil											B-814	B-816	B-818	B-822	B-822
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to Groundwater	*MSA Background*	UNITS/	B814 (7.0-8.0') 4/1/2008	B816 (9.0-10.0') 4/1/2008	B818 (7.0-9.0') 4/1/2008	B822 (7.0-8.0') 4/1/2008	B822 (6.0-8.0') 4/1/2008
CONSTITUENT	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**	**(Class I)**	**Metropolitan Areas**	**DEPTH**	**7.0-8.0'**	**9.0-10.0'**	**7.0-9.0'**	**7.0-8.0'**	**6.0-8.0'**
Benzene	12.0	100	2,300	0.80	1.60	2.20	0.069	0.51	0.030	--	(mg/kg)	0.0012	0.0015	<0.0401	<0.0064	<0.0159
Ethylbenzene	7,800	200,000	20,000	400	400	58.0	130.0	130.0	13.0	--	(mg/kg)	<0.0061	<0.0061	7.54	<0.0321	<0.0795
Toluene	16,000	410,000	410,000	650	650	42.0	240.0	240.0	12.0	--	(mg/kg)	0.0018	<0.0061	<0.201	<0.0321	<0.0795
Xylene (total)	16,000	410,000	41,000	410	320	5.6	63.0	100.0	150.0	--	(mg/kg)	0.0013	<0.0061	3.95	<0.0321	0.025
Acenaphthene	4,700	120,000	120,000	-----	-----	-----	-----	-----	570.0	0.130	(mg/kg)	<0.004	0.013	0.943	<0.005	<0.004
Acenaphthylene	2,300[(1)]	61,000 [(1)]	61,000 [(1)]	-----	-----	-----	-----	-----	24.0[(1)]	0.070	(mg/kg)	<0.004	0.009	0.613	0.213	0.037
Anthracene	23,000	610,000	610,000	-----	-----	-----	-----	-----	12,000	0.400	(mg/kg)	<0.004	<0.004	1.14	0.010	0.007
Benzo(a)anthracene	0.90	8.0	170.0	-----	-----	-----	-----	-----	2.0	1.800	(mg/kg)	<0.004	<0.004	0.858	0.018	0.012
Benzo(a)pyrene	0.09	0.80	17.0	-----	-----	-----	-----	-----	8.0	2.100	(mg/kg)	<0.004	<0.004	0.921	0.029	0.014
Benzo(b)fluoranthene	0.90	8.0	170.0	-----	-----	-----	-----	-----	5.0	2.100	(mg/kg)	<0.004	<0.004	0.713	0.053	0.015
Benzo(ghi)perylene	2,300[(1)]	61,000 [(1)]	61,000 [(1)]	-----	-----	-----	-----	-----	32,000[(1)]	1.700	(mg/kg)	<0.004	<0.004	0.338	0.054	0.016
Benzo(k)fluoranthene	9.0	78.0	1,700	-----	-----	-----	-----	-----	49.0	1.700	(mg/kg)	<0.004	<0.004	0.227	0.018	0.006
Chrysene	88.0	780.0	17,000	-----	-----	-----	-----	-----	160.0	2.700	(mg/kg)	<0.004	<0.004	0.820	0.017	0.008
Dibenzo(a,h)anthracene	0.09	0.80	17.0	-----	-----	-----	-----	-----	2.0	0.420	(mg/kg)	<0.004	<0.004	0.099	0.015	<0.004
Fluoranthene	3,100	82,000	82,000	-----	-----	-----	-----	-----	4,300	4.100	(mg/kg)	<0.004	<0.004	1.82	0.019	0.010
Fluorene	3,100	82,000	82,000	-----	-----	-----	-----	-----	560.0	0.180	(mg/kg)	<0.004	<0.004	0.815	0.007	0.004
Indeno(1,2,3-cd)pyrene	0.90	8.0	170.0	-----	-----	-----	-----	-----	14.0	1.600	(mg/kg)	<0.004	<0.004	0.293	0.045	0.013
Naphthalene	1,600	41,000	4,100	170	270	1.80	34.0	34.0	12.0	0.200	(mg/kg)	<0.004	<0.004	0.082	0.012	0.010
Phenanthrene	2,300[(1)]	61,000 [(1)]	61,000 [(1)]	-----	-----	-----	-----	-----	220[(1)]	2.500	(mg/kg)	<0.004	<0.004	3.77	0.008	0.013
Pyrene	2,300	61,000	61,000	-----	-----	-----	-----	-----	4,200	3.000	(mg/kg)	<0.004	0.005	2.64	0.030	0.029

Notes:	mg/kg	Milligrams per kilogram
	(1)	Provisional remediation objective provided by IEPA
	-----	No remediation objective has been established by the IEPA for this constitiuent for this exposure route
	<12	Not detected at the level identified
		Analytical result exceeds one or more Tier 1 RO

TABLE 3-4
TIER 1 COMPARISON - BTEX AND PAH RESULTS FOR 3 TO 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remedial Objectives - Soil											B-823	B-823	B-827	B-829	B-833
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to Groundwater	*MSA Background*	UNITS/	B823 (3.0-4.0') 4/1/2008	B823 (9.0-10.0') 4/1/2008	B827 (7.0-8.0') 4/2/2008	B829 (6.0-7.0') 4/2/2008	B833 (9.0-10.0') 4/2/2008
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)	Metropolitan Areas	DEPTH	3.0-4.0'	9.0-10.0'	7.0-8.0'	6.0-7.0'	9.0-10.0'
Benzene	12.0	100	2,300	0.80	1.60	2.20	0.069	0.51	0.030	--	(mg/kg)	<0.0014	0.0029	<0.0227	0.253	13.20
Ethylbenzene	7,800	200,000	20,000	400	400	58.0	130.0	130.0	13.0	--	(mg/kg)	<0.0068	0.0108	<0.113	0.066	5.50
Toluene	16,000	410,000	410,000	650	650	42.0	240.0	240.0	12.0	--	(mg/kg)	0.0014	0.0058	<0.113	<0.132	34.90
Xylene (total)	16,000	410,000	41,000	410	320	5.6	63.0	100.0	150.0	--	(mg/kg)	0.0026	0.0326	<0.113	0.061	54.0
Acenaphthene	4,700	120,000	120,000	-----	-----	-----	-----	-----	570.0	0.130	(mg/kg)	<0.005	<0.022	0.031	2.0	3.09
Acenaphthylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	24.0(1)	0.070	(mg/kg)	0.045	0.372	0.072	0.240	11.70
Anthracene	23,000	610,000	610,000	-----	-----	-----	-----	-----	12,000	0.400	(mg/kg)	0.010	0.060	0.016	0.975	11.0
Benzo(a)anthracene	0.90	8.0	170.0	-----	-----	-----	-----	-----	2.0	1.800	(mg/kg)	0.057	0.484	0.019	0.673	6.26
Benzo(a)pyrene	0.09	0.80	17.0	-----	-----	-----	-----	-----	8.0	2.100	(mg/kg)	0.067	0.732	0.059	0.545	4.38
Benzo(b)fluoranthene	0.90	8.0	170.0	-----	-----	-----	-----	-----	5.0	2.100	(mg/kg)	0.065	0.350	0.082	0.513	4.86
Benzo(ghi)perylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	32,000(1)	1.700	(mg/kg)	0.059	0.337	0.053	0.227	1.30
Benzo(k)fluoranthene	9.0	78.0	1,700	-----	-----	-----	-----	-----	49.0	1.700	(mg/kg)	0.060	0.368	0.019	0.179	1.93
Chrysene	88.0	780.0	17,000	-----	-----	-----	-----	-----	160.0	2.700	(mg/kg)	0.058	0.494	0.018	0.625	5.35
Dibenzo(a,h)anthracene	0.09	0.80	17.0	-----	-----	-----	-----	-----	2.0	0.420	(mg/kg)	0.018	0.085	0.015	0.071	0.517
Fluoranthene	3,100	82,000	82,000	-----	-----	-----	-----	-----	4,300	4.100	(mg/kg)	0.063	0.467	0.019	1.68	17.0
Fluorene	3,100	82,000	82,000	-----	-----	-----	-----	-----	560.0	0.180	(mg/kg)	<0.005	0.022	0.043	1.38	14.2
Indeno(1,2,3-cd)pyrene	0.90	8.0	170.0	-----	-----	-----	-----	-----	14.0	1.600	(mg/kg)	0.057	0.259	0.047	0.194	1.43
Naphthalene	1,600	41,000	4,100	170	270	1.80	34.0	34.0	12.0	0.200	(mg/kg)	0.008	<0.022	<0.008	0.063	52.2
Phenanthrene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	220(1)	2.500	(mg/kg)	0.032	<0.022	0.008	4.10	36.5
Pyrene	2,300	61,000	61,000	-----	-----	-----	-----	-----	4,200	3.000	(mg/kg)	0.072	1.08	0.099	2.03	14.3

Notes:

mg/kg	Milligrams per kilogram
(1)	Provisional remediation objective provided by IEPA
-----	No remediation objective has been established by the IEPA for this constitiuent for this exposure route
<12	Not detected at the level identified
	Analytical result exceeds one or more Tier 1 RO

TABLE 3-4
TIER 1 COMPARISON - BTEX AND PAH RESULTS FOR 3 TO 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remedial Objectives - Soil																
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to Groundwater	*MSA Background*		B-501	B-502	B-503	B-504	B-505	B-506
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)	Metropolitan Areas	UNITS/ DEPTH	B-501-8 7/13/2004 7'-8'	B-502-7 7/13/2004 6'-7'	B-503-10 7/13/2004 9'-10'	B-504-7 7/13/2004 6'-7'	B-505-6 7/14/2004 5'-6'	B-506-7 7/22/2004 6'-7'
Benzene	12.0	100	2,300	0.80	1.60	2.20	0.069	0.51	0.030	--	(mg/kg)	0.183	10.9	0.534	20.8	14.5	11.2
Ethylbenzene	7,800	200,000	20,000	400	400	58.0	130.0	130.0	13.0	--	(mg/kg)	0.041	5.66	0.523	145.0	79.8	46.2
Toluene	16,000	410,000	410,000	650	650	42.0	240.0	240.0	12.0	--	(mg/kg)	<0.123	0.22	0.30	10.9	3.8	0.74
Xylene (total)	16,000	410,000	41,000	410	320	5.6	63.0	100.0	150.0	--	(mg/kg)	0.041	11.0	0.837	140.0	69.9	33.7
Acenaphthene	4,700	120,000	120,000	-----	-----	-----	-----	-----	570.0	0.130	(mg/kg)	0.05	15.5	1.58	594.0	540.0	169.0
Acenaphthylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	24.0(1)	0.070	(mg/kg)	0.24	2.70	0.316	71.0	81.4	12.30
Anthracene	23,000	610,000	610,000	-----	-----	-----	-----	-----	12,000	0.400	(mg/kg)	0.18	11.70	1.38	303.0	279.0	71.20
Benzo(a)anthracene	0.90	8.0	170.0	-----	-----	-----	-----	-----	2.0	1.800	(mg/kg)	0.18	8.70	0.63	169.0	137.0	32.60
Benzo(a)pyrene	0.09	0.80	17.0	-----	-----	-----	-----	-----	8.0	2.100	(mg/kg)	0.27	4.10	0.515	130.0	141.0	35.20
Benzo(b)fluoranthene	0.90	8.0	170.0	-----	-----	-----	-----	-----	5.0	2.100	(mg/kg)	0.25	17.60	0.633	110.0	130.0	29.0
Benzo(ghi)perylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	32,000(1)	1.700	(mg/kg)	0.063	4.0	0.11	<160	31.0	7.19
Benzo(k)fluoranthene	9.0	78.0	1,700	-----	-----	-----	-----	-----	49.0	1.700	(mg/kg)	0.097	5.60	0.24	<160	45.10	7.42
Chrysene	88.0	780.0	17,000	-----	-----	-----	-----	-----	160.0	2.700	(mg/kg)	0.17	18.60	0.651	150.0	143.0	33.0
Dibenzo(a,h)anthracene	0.09	0.80	17.0	-----	-----	-----	-----	-----	2.0	0.420	(mg/kg)	<0.301	1.90	0.045	<160	10.0	2.3
Fluoranthene	3,100	82,000	82,000	-----	-----	-----	-----	-----	4,300	4.100	(mg/kg)	0.336	16.9	1.85	317.0	294.0	78.4
Fluorene	3,100	82,000	82,000	-----	-----	-----	-----	-----	560.0	0.180	(mg/kg)	0.328	20.10	1.23	406.0	404.0	90.5
Indeno(1,2,3-cd)pyrene	0.90	8.0	170.0	-----	-----	-----	-----	-----	14.0	1.600	(mg/kg)	0.064	4.7	0.13	<160.0	35.0	6.0
Naphthalene	1,600	41,000	4,100	170	270	1.80	34.0	34.0	12.0	0.200	(mg/kg)	<0.301	59.40	16.0	2000	2340	794.0
Phenanthrene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	220(1)	2.500	(mg/kg)	0.038	49.60	3.48	1120	923.0	247.0
Pyrene	2,300	61,000	61,000	-----	-----	-----	-----	-----	4,200	3.000	(mg/kg)	0.502	24.90	1.52	436	405.0	114.0

Notes:

mg/kg	Milligrams per kilogram
(1)	Provisional remediation objective provided by IEPA
-----	No remediation objective has been established by the IEPA for this constitiuent for this exposure route
<12	Not detected at the level identified
	Analytical result exceeds one or more Tier 1 RO

TABLE 3-4
TIER 1 COMPARISON - BTEX AND PAH RESULTS FOR 3 TO 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remedial Objectives - Soil																
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to Groundwater	*MSA Background*		B-507	B-508	B-509	B-510	B-512	B-513
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)	Metropolitan Areas	UNITS/ DEPTH	B-507-8 7/21/2004 7'-8'	B-508-9 7/19/2004 8'-9'	B-509-8 7/21/2004 7'-8'	B-510-5 7/12/2004 4'-5'	B-512-8 7/12/2004 7'-8'	B-513-8 7/12/2004 7'-8'
Benzene	12.0	100	2,300	0.80	1.60	2.20	0.069	0.51	0.030	--	(mg/kg)	3.51	2.08	0.0046	0.0043	<0.0244	<0.0202
Ethylbenzene	7,800	200,000	20,000	400	400	58.0	130.0	130.0	13.0	--	(mg/kg)	22.2	33.1	0.0038	<0.0049	<0.0122	0.036
Toluene	16,000	410,000	410,000	650	650	42.0	240.0	240.0	12.0	--	(mg/kg)	0.28	0.575	0.0014	0.0017	<0.0122	<0.101
Xylene (total)	16,000	410,000	41,000	410	320	5.6	63.0	100.0	150.0	--	(mg/kg)	16.6	24.3	0.012	0.0013	<0.0122	0.044
Acenaphthene	4,700	120,000	120,000	-----	-----	-----	-----	-----	570.0	0.130	(mg/kg)	52.90	50.90	9.76	<0.313	0.30	1.58
Acenaphthylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	24.0(1)	0.070	(mg/kg)	3.58	5.80	4.69	0.150	<0.442	2.04
Anthracene	23,000	610,000	610,000	-----	-----	-----	-----	-----	12,000	0.400	(mg/kg)	24.20	22.30	7.21	0.067	0.15	2.78
Benzo(a)anthracene	0.90	8.0	170.0	-----	-----	-----	-----	-----	2.0	1.800	(mg/kg)	9.46	11.80	9.37	0.498	<0.442	1.15
Benzo(a)pyrene	0.09	0.80	17.0	-----	-----	-----	-----	-----	8.0	2.100	(mg/kg)	11.6	10.00	8.67	0.509	<0.442	0.954
Benzo(b)fluoranthene	0.90	8.0	170.0	-----	-----	-----	-----	-----	5.0	2.100	(mg/kg)	7.86	7.90	6.81	0.707	<0.442	0.822
Benzo(ghi)perylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	32,000(1)	1.700	(mg/kg)	2.41	4.5	2.85	0.28	<0.442	0.42
Benzo(k)fluoranthene	9.0	78.0	1,700	-----	-----	-----	-----	-----	49.0	1.700	(mg/kg)	2.32	3.1	2.54	0.22	<0.442	0.28
Chrysene	88.0	780.0	17,000	-----	-----	-----	-----	-----	160.0	2.700	(mg/kg)	8.79	<11.1	9.0	0.589	<0.442	1.09
Dibenzo(a,h)anthracene	0.09	0.80	17.0	-----	-----	-----	-----	-----	2.0	0.420	(mg/kg)	0.72	<11.1	<2.25	0.074	<0.442	0.11
Fluoranthene	3,100	82,000	82,000	-----	-----	-----	-----	-----	4,300	4.100	(mg/kg)	26.50	23.10	17.80	0.652	<0.442	2.07
Fluorene	3,100	82,000	82,000	-----	-----	-----	-----	-----	560.0	0.180	(mg/kg)	34.60	29.5	12.70	0.048	0.31	4.23
Indeno(1,2,3-cd)pyrene	0.90	8.0	170.0	-----	-----	-----	-----	-----	14.0	1.600	(mg/kg)	2.31	3.5	2.36	0.23	<0.442	0.43
Naphthalene	1,600	41,000	4,100	170	270	1.80	34.0	34.0	12.0	0.200	(mg/kg)	171.0	143.0	<2.25	0.033	<0.442	<0.660
Phenanthrene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	220(1)	2.500	(mg/kg)	77.20	63.60	37.40	0.21	0.644	9.26
Pyrene	2,300	61,000	61,000	-----	-----	-----	-----	-----	4,200	3.000	(mg/kg)	37.0	32.90	25.20	1.04	0.15	3.17

Notes:

mg/kg	Milligrams per kilogram
(1)	Provisional remediation objective provided by IEPA
-----	No remediation objective has been established by the IEPA for this constitiuent for this exposure route
<12	Not detected at the level identified
	Analytical result exceeds one or more Tier 1 RO

TABLE 3-4
TIER 1 COMPARISON - BTEX AND PAH RESULTS FOR 3 TO 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remedial Objectives - Soil											B-514	B-515	B-516	B-550	B-551	B-553
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to Groundwater	*MSA Background*	UNITS/	B-514-8	B-515-7	B-516-5	B-550-9	B-551-10	B-553-6
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)	Metropolitan Areas	DEPTH	7/22/2004 7'-8'	7/16/2004 6'-7'	7/22/2004 4'-5'	7/20/2004 8'-9'	7/15/2004 9'-10'	7/14/2004 5'-6'
Benzene	12.0	100	2,300	0.80	1.60	2.20	0.069	0.51	0.030	--	(mg/kg)	3.10	9.03	0.656	0.61	1.26	4.05
Ethylbenzene	7,800	200,000	20,000	400	400	58.0	130.0	130.0	13.0	--	(mg/kg)	23.5	59.1	4.72	1.26	13.6	20.8
Toluene	16,000	410,000	410,000	650	650	42.0	240.0	240.0	12.0	--	(mg/kg)	0.446	2.45	0.289	0.055	0.069	0.811
Xylene (total)	16,000	410,000	41,000	410	320	5.6	63.0	100.0	150.0	--	(mg/kg)	19.8	40.7	1.48	0.623	5.72	19.3
Acenaphthene	4,700	120,000	120,000	-----	-----	-----	-----	-----	570.0	0.130	(mg/kg)	48.10	268.0	7.5	5.33	23.30	280.0
Acenaphthylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	24.0(1)	0.070	(mg/kg)	8.83	34.20	4.97	0.791	3.00	27.0
Anthracene	23,000	610,000	610,000	-----	-----	-----	-----	-----	12,000	0.400	(mg/kg)	19.30	103.0	3.75	2.63	13.30	166.0
Benzo(a)anthracene	0.90	8.0	170.0	-----	-----	-----	-----	-----	2.0	1.800	(mg/kg)	10.80	64.70	7.19	1.57	9.62	119.0
Benzo(a)pyrene	0.09	0.80	17.0	-----	-----	-----	-----	-----	8.0	2.100	(mg/kg)	12.90	88.20	15.50	1.83	12.30	125.0
Benzo(b)fluoranthene	0.90	8.0	170.0	-----	-----	-----	-----	-----	5.0	2.100	(mg/kg)	8.94	66.30	13.30	1.39	11.0	131.0
Benzo(ghi)perylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	32,000(1)	1.700	(mg/kg)	2.75	25.90	4.98	0.41	3.50	29.0
Benzo(k)fluoranthene	9.0	78.0	1,700	-----	-----	-----	-----	-----	49.0	1.700	(mg/kg)	2.59	24.90	4.25	0.41	4.20	50.5
Chrysene	88.0	780.0	17,000	-----	-----	-----	-----	-----	160.0	2.700	(mg/kg)	10.20	73.50	8.45	1.58	10.10	116.0
Dibenzo(a,h)anthracene	0.09	0.80	17.0	-----	-----	-----	-----	-----	2.0	0.420	(mg/kg)	0.85	11.0	1.30	0.16	1.0	9.7
Fluoranthene	3,100	82,000	82,000	-----	-----	-----	-----	-----	4,300	4.100	(mg/kg)	23.60	148.0	7.63	2.60	20.50	302.0
Fluorene	3,100	82,000	82,000	-----	-----	-----	-----	-----	560.0	0.180	(mg/kg)	36.30	146.0	5.51	4.35	15.20	179.0
Indeno(1,2,3-cd)pyrene	0.90	8.0	170.0	-----	-----	-----	-----	-----	14.0	1.600	(mg/kg)	2.69	26.70	4.47	0.37	3.70	34.0
Naphthalene	1,600	41,000	4,100	170	270	1.80	34.0	34.0	12.0	0.200	(mg/kg)	105.0	509.0	23.90	2.70	46.30	877.0
Phenanthrene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	220(1)	2.500	(mg/kg)	71.5	341.0	11.60	9.57	40.80	535.0
Pyrene	2,300	61,000	61,000	-----	-----	-----	-----	-----	4,200	3.000	(mg/kg)	33.0	192.0	14.50	3.85	21.40	335.0

Notes:

mg/kg	Milligrams per kilogram
(1)	Provisional remediation objective provided by IEPA
-----	No remediation objective has been established by the IEPA for this constitiuent for this exposure route
<12	Not detected at the level identified
	Analytical result exceeds one or more Tier 1 RO

TABLE 3-4
TIER 1 COMPARISON - BTEX AND PAH RESULTS FOR 3 TO 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remedial Objectives - Soil											B-554	B-556	B-557	TP-501	TP-503A	TP-507
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to Groundwater	*MSA Background*		B-554-10	B-556-6	B-557-10	TP-501-7	TP-503A-3.5	TP-507-3.5
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)	Metropolitan Areas	UNITS/ DEPTH	7/15/2004 9'-10'	7/20/2004 5'-6'	7/20/2004 9'-10'	7/8/2004 7'	7/8/2004 3.5'	7/7/2004 3.5'
Benzene	12.0	100	2,300	0.80	1.60	2.20	0.069	0.51	0.030	--	(mg/kg)	0.765	2.77	0.0071	0.438	12.8	13.2
Ethylbenzene	7,800	200,000	20,000	400	400	58.0	130.0	130.0	13.0	--	(mg/kg)	3.91	19.9	0.0074	30.6	14.6	64.1
Toluene	16,000	410,000	410,000	650	650	42.0	240.0	240.0	12.0	--	(mg/kg)	2.7	<1.03	0.002	<0.220	2.56	3.75
Xylene (total)	16,000	410,000	41,000	410	320	5.6	63.0	100.0	150.0	--	(mg/kg)	6.12	12.2	0.0134	16.6	14.9	92.6
Acenaphthene	4,700	120,000	120,000	-----	-----	-----	-----	-----	570.0	0.130	(mg/kg)	77.40	63.90	0.319	18.0	3.0	55.0
Acenaphthylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	24.0(1)	0.070	(mg/kg)	7.30	4.20	0.130	6.80	0.78	57.0
Anthracene	23,000	610,000	610,000	-----	-----	-----	-----	-----	12,000	0.400	(mg/kg)	29.40	27.70	0.183	8.10	0.87	30.0
Benzo(a)anthracene	0.90	8.0	170.0	-----	-----	-----	-----	-----	2.0	1.800	(mg/kg)	12.80	12.10	0.141	4.70	1.50	23.0
Benzo(a)pyrene	0.09	0.80	17.0	-----	-----	-----	-----	-----	8.0	2.100	(mg/kg)	14.50	12.30	0.163	5.20	2.90	21.0
Benzo(b)fluoranthene	0.90	8.0	170.0	-----	-----	-----	-----	-----	5.0	2.100	(mg/kg)	12.80	8.70	0.133	2.30	1.50	12.0
Benzo(ghi)perylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	32,000(1)	1.700	(mg/kg)	2.20	5.0	0.054	1.30	1.30	7.90
Benzo(k)fluoranthene	9.0	78.0	1,700	-----	-----	-----	-----	-----	49.0	1.700	(mg/kg)	4.70	2.40	0.039	1.60	0.75	6.90
Chrysene	88.0	780.0	17,000	-----	-----	-----	-----	-----	160.0	2.700	(mg/kg)	13.80	13.0	0.142	5.70	1.70	27.0
Dibenzo(a,h)anthracene	0.09	0.80	17.0	-----	-----	-----	-----	-----	2.0	0.420	(mg/kg)	0.79	1.30	0.02	1.20	<0.110	<0.093
Fluoranthene	3,100	82,000	82,000	-----	-----	-----	-----	-----	4,300	4.100	(mg/kg)	31.90	27.30	0.334	20.0	2.90	89.0
Fluorene	3,100	82,000	82,000	-----	-----	-----	-----	-----	560.0	0.180	(mg/kg)	41.70	26.40	0.199	13.0	0.75	49.0
Indeno(1,2,3-cd)pyrene	0.90	8.0	170.0	-----	-----	-----	-----	-----	14.0	1.600	(mg/kg)	1.90	4.30	0.048	1.50	1.40	7.20
Naphthalene	1,600	41,000	4,100	170	270	1.80	34.0	34.0	12.0	0.200	(mg/kg)	1.80	205.0	0.014	18.0	9.20	240.0
Phenanthrene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	220(1)	2.500	(mg/kg)	90.70	90.0	1.11	32.0	2.90	140.0
Pyrene	2,300	61,000	61,000	-----	-----	-----	-----	-----	4,200	3.000	(mg/kg)	42.40	40.40	0.499	14.0	2.70	63.0

Notes:

mg/kg	Milligrams per kilogram
(1)	Provisional remediation objective provided by IEPA
-----	No remediation objective has been established by the IEPA for this constitiuent for this exposure route
<12	Not detected at the level identified
	Analytical result exceeds one or more Tier 1 RO

TABLE 3-4
TIER 1 COMPARISON - BTEX AND PAH RESULTS FOR 3 TO 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remedial Objectives - Soil											TP-508	UTB-14	UTB-15	UTB-20	UTB-21	UTB-22
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to Groundwater	*MSA Background*	UNITS/	TP-508-4	UTB-14-01	UTB-15-S01	UTB-20-S01	UTB-21-S01	UTB-22-S01
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)	Metropolitan Areas	DEPTH	7/8/2004 4'	12/5/1990 4'-5'	12/13/1991 9'-11'	12/11/1991 7'-8'	12/12/1991 3'-8'	12/12/1991 6'-8'
Benzene	12.0	100	2,300	0.80	1.60	2.20	0.069	0.51	0.030	--	(mg/kg)	6.4	<0.310	0.36	<0.310	<3.100	<0.310
Ethylbenzene	7,800	200,000	20,000	400	400	58.0	130.0	130.0	13.0	--	(mg/kg)	57.0	<0.310	1.80	<0.310	20.0	<0.310
Toluene	16,000	410,000	410,000	650	650	42.0	240.0	240.0	12.0	--	(mg/kg)	7.34	<0.310	<0.310	<0.310	8.8	<0.310
Xylene (total)	16,000	410,000	41,000	410	320	5.6	63.0	100.0	150.0	--	(mg/kg)	76.0	0.33	1.70	<0.310	<3.100	<0.310
Acenaphthene	4,700	120,000	120,000	-----	-----	-----	-----	-----	570.0	0.130	(mg/kg)	330.0	38.0	32.0	0.12	46.0	<1.3
Acenaphthylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	24.0(1)	0.070	(mg/kg)	240.0	<19.0	<16.0	0.16	1.30	<1.3
Anthracene	23,000	610,000	610,000	-----	-----	-----	-----	-----	12,000	0.400	(mg/kg)	110.0	34.0	15.0	<0007	29.0	<1.3
Benzo(a)anthracene	0.90	8.0	170.0	-----	-----	-----	-----	-----	2.0	1.800	(mg/kg)	64.0	24.0	8.70	0.066	17.0	<1.3
Benzo(a)pyrene	0.09	0.80	17.0	-----	-----	-----	-----	-----	8.0	2.100	(mg/kg)	50.0	20.0	<16.0	<0.0077	12.0	<1.3
Benzo(b)fluoranthene	0.90	8.0	170.0	-----	-----	-----	-----	-----	5.0	2.100	(mg/kg)	56.0	22.0	<16.0	<0.001	12.0	<1.3
Benzo(ghi)perylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	32,000(1)	1.700	(mg/kg)	13.0	<19.0	<16.0	<0.0047	10.0	<1.3
Benzo(k)fluoranthene	9.0	78.0	1,700	-----	-----	-----	-----	-----	49.0	1.700	(mg/kg)	13.0	<19.0	<16.0	<0.0004	<0.660	<1.3
Chrysene	88.0	780.0	17,000	-----	-----	-----	-----	-----	160.0	2.700	(mg/kg)	66.0	26.0	<16.0	<0.001	11.0	<1.3
Dibenzo(a,h)anthracene	0.09	0.80	17.0	-----	-----	-----	-----	-----	2.0	0.420	(mg/kg)	9.10	<19.0	<16.0	<0.0028	<0.660	<1.3
Fluoranthene	3,100	82,000	82,000	-----	-----	-----	-----	-----	4,300	4.100	(mg/kg)	300.0	46.0	16.0	0.10	26.0	<1.3
Fluorene	3,100	82,000	82,000	-----	-----	-----	-----	-----	560.0	0.180	(mg/kg)	210.0	38.0	18.0	<0.0006	27.0	0.69
Indeno(1,2,3-cd)pyrene	0.90	8.0	170.0	-----	-----	-----	-----	-----	14.0	1.600	(mg/kg)	14.0	<19.0	5.10	<0.001	8.50	<1.3
Naphthalene	1,600	41,000	4,100	170	270	1.80	34.0	34.0	12.0	0.200	(mg/kg)	710.0	22.0	120.0	<0.005	320.0	<1.3
Phenanthrene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	220(1)	2.500	(mg/kg)	500.0	96.0	54.0	<0.005	120.0	1.50
Pyrene	2,300	61,000	61,000	-----	-----	-----	-----	-----	4,200	3.000	(mg/kg)	180.0	48.0	23.0	0.14	58.0	<1.3

Notes:

mg/kg	Milligrams per kilogram
(1)	Provisional remediation objective provided by IEPA
-----	No remediation objective has been established by the IEPA for this constituent for this exposure route
<12	Not detected at the level identified
	Analytical result exceeds one or more Tier 1 RO

TABLE 3-4
TIER 1 COMPARISON - BTEX AND PAH RESULTS FOR 3 TO 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remedial Objectives - Soil														
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to Groundwater	*MSA Background*		UTB-23 UTB-23-S01 12/14/1991	UTB-24 UTB-24-S01 12/15/1991	UTB-25 UTB-25-S01 12/14/1991	UTB-26 UTB-26-S01 12/15/1991	UTB-27 UTB-27-S01 12/16/1991
CONSTITUENT	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**	**(Class I)**	**Metropolitan Areas**	**UNITS/ DEPTH**	**6'-8'**	**6'-8'**	**9'-11'**	**6'-8'**	**6'-8**
Benzene	12.0	100	2,300	0.80	1.60	2.20	0.069	0.51	0.030	--	(mg/kg)	56.0	<3.100	2.70	0.58	12.0
Ethylbenzene	7,800	200,000	20,000	400	400	58.0	130.0	130.0	13.0	--	(mg/kg)	82.0	8.20	9.50	22.0	7.4
Toluene	16,000	410,000	410,000	650	650	42.0	240.0	240.0	12.0	--	(mg/kg)	54.0	<3.100	4.0	<0.310	22.0
Xylene (total)	16,000	410,000	41,000	410	320	5.6	63.0	100.0	150.0	--	(mg/kg)	100.0	5.60	12.0	2.30	35.0
Acenaphthene	4,700	120,000	120,000	-----	-----	-----	-----	-----	570.0	0.130	(mg/kg)	390.0	100.0	53.0	17.0	37.0
Acenaphthylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	24.0(1)	0.070	(mg/kg)	<160	<82	13.0	<3.3	12.0
Anthracene	23,000	610,000	610,000	-----	-----	-----	-----	-----	12,000	0.400	(mg/kg)	230.0	<82	37.0	8.10	45.0
Benzo(a)anthracene	0.90	8.0	170.0	-----	-----	-----	-----	-----	2.0	1.800	(mg/kg)	160.0	<82	13.0	4.30	36.0
Benzo(a)pyrene	0.09	0.80	17.0	-----	-----	-----	-----	-----	8.0	2.100	(mg/kg)	<160	<82	6.80	4.30	14.0
Benzo(b)fluoranthene	0.90	8.0	170.0	-----	-----	-----	-----	-----	5.0	2.100	(mg/kg)	<160	<82	5.20	<3.3	13.0
Benzo(ghi)perylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	32,000(1)	1.700	(mg/kg)	<160	<82	5.60	<3.3	11.0
Benzo(k)fluoranthene	9.0	78.0	1,700	-----	-----	-----	-----	-----	49.0	1.700	(mg/kg)	<160	<82	2.0	<3.3	4.80
Chrysene	88.0	780.0	17,000	-----	-----	-----	-----	-----	160.0	2.700	(mg/kg)	160.0	<82	8.10	4.10	22.0
Dibenzo(a,h)anthracene	0.09	0.80	17.0	-----	-----	-----	-----	-----	2.0	0.420	(mg/kg)	<160	<82	1.30	<3.3	2.30
Fluoranthene	3,100	82,000	82,000	-----	-----	-----	-----	-----	4,300	4.100	(mg/kg)	360.0	68.0	51.0	9.50	49.0
Fluorene	3,100	82,000	82,000	-----	-----	-----	-----	-----	560.0	0.180	(mg/kg)	370.0	57.0	38.0	8.80	35.0
Indeno(1,2,3-cd)pyrene	0.90	8.0	170.0	-----	-----	-----	-----	-----	14.0	1.600	(mg/kg)	<160	<82	5.40	<3.3	15.0
Naphthalene	1,600	41,000	4,100	170	270	1.80	34.0	34.0	12.0	0.200	(mg/kg)	2600.0	490.0	380.0	45.0	120.0
Phenanthrene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	220(1)	2.500	(mg/kg)	1000.0	56.0	68.0	27.0	180.0
Pyrene	2,300	61,000	61,000	-----	-----	-----	-----	-----	4,200	3.000	(mg/kg)	630.0	110.0	34.0	17.0	103.0

Notes:

mg/kg	Milligrams per kilogram
(1)	Provisional remediation objective provided by IEPA
-----	No remediation objective has been established by the IEPA for this constitiuent for this exposure route
<12	Not detected at the level identified
	Analytical result exceeds one or more Tier 1 RO

TABLE 3-5
TIER 1 COMPARISON - BTEX AND PAH RESULTS FOR GREATER THAN 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remediation Objectives - Soil											B-814	B-816	B-818	B-822	B-822
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to Groundwater	*MSA Background*	UNITS/	B814 (17.0-18.0')	B816 (19.0-21.0')	B818 (13.0-15.0')	B822 (13.0-15.0')	B822 (27.0-28.0')
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)	Metropolitan Areas	DEPTH	4/1/2008 17.0-18.0	4/1/2008 19.0-21.0	4/1/2008 13.0-15.0	4/1/2008 13.0-15.0	4/1/2008 27.0-28.0
Benzene	12.0	100	2,300	0.80	1.60	2.20	0.069	0.51	0.030	--	(mg/kg)	0.002	0.0009	0.0436	0.0038	0.0025
Ethylbenzene	7,800	200,000	20,000	400	400	58.0	130.0	130.0	13.0	--	(mg/kg)	<0.0062	<0.0042	0.205	0.0026	0.0032
Toluene	16,000	410,000	410,000	650	650	42.0	240.0	240.0	12.0	--	(mg/kg)	0.0025	0.0011	0.042	0.0032	0.0025
Xylene (total)	16,000	410,000	41,000	410	320	5.6	63.0	100.0	150.0	--	(mg/kg)	0.0017	<0.0042	0.972	0.0049	0.002
Acenaphthene	4,700	120,000	120,000	-----	-----	-----	-----	-----	570.0	0.130	(mg/kg)	<0.004	<0.004	1.75	<0.004	<0.004
Acenaphthylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	24.0(1)	0.070	(mg/kg)	<0.004	<0.004	1.06	<0.004	<0.004
Anthracene	23,000	610,000	610,000	-----	-----	-----	-----	-----	12,000	0.400	(mg/kg)	<0.004	<0.004	1.48	<0.004	<0.004
Benzo(a)anthracene	0.90	8.0	170.0	-----	-----	-----	-----	-----	2.0	1.800	(mg/kg)	<0.004	<0.004	1.06	<0.004	<0.004
Benzo(a)pyrene	0.09	0.80	17.0	-----	-----	-----	-----	-----	8.0	2.100	(mg/kg)	<0.004	<0.004	1.42	<0.004	<0.004
Benzo(b)fluoranthene	0.90	8.0	170.0	-----	-----	-----	-----	-----	5.0	2.100	(mg/kg)	<0.004	<0.004	1.1	<0.004	<0.004
Benzo(ghi)perylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	32,000(1)	1.700	(mg/kg)	0.004	<0.004	0.739	<0.004	<0.004
Benzo(k)fluoranthene	9.0	78.0	1,700	-----	-----	-----	-----	-----	49.0	1.700	(mg/kg)	<0.004	<0.004	0.35	<0.004	<0.004
Chrysene	88.0	780.0	17,000	-----	-----	-----	-----	-----	160.0	2.700	(mg/kg)	<0.004	<0.004	1.12	<0.004	<0.004
Dibenzo(a,h)anthracene	0.09	0.80	17.0	-----	-----	-----	-----	-----	2.0	0.420	(mg/kg)	<0.004	<0.004	0.179	<0.004	<0.004
Fluoranthene	3,100	82,000	82,000	-----	-----	-----	-----	-----	4,300	4.100	(mg/kg)	<0.004	<0.004	2.27	<0.004	<0.004
Fluorene	3,100	82,000	82,000	-----	-----	-----	-----	-----	560.0	0.180	(mg/kg)	<0.004	<0.004	1.36	<0.004	<0.004
Indeno(1,2,3-cd)pyrene	0.90	8.0	170.0	-----	-----	-----	-----	-----	14.0	1.600	(mg/kg)	<0.004	<0.004	0.564	<0.004	<0.004
Naphthalene	1,600	41,000	4,100	170	270	1.80	34.0	34.0	12.0	0.200	(mg/kg)	<0.004	<0.004	8.10	0.007	<0.004
Phenanthrene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	220(1)	2.500	(mg/kg)	<0.004	<0.004	5.23	<0.004	<0.004
Pyrene	2,300	61,000	61,000	-----	-----	-----	-----	-----	4,200	3.000	(mg/kg)	0.004	<0.004	3.34	<0.004	<0.004

Notes:

mg/kg	Milligrams per kilogram
(1)	Provisional remediation objective provided by IEPA
-----	No remediation objective has been established by the IEPA for this constituent for this exposure route
<12	Not detected at the level identified
	Analytical result exceeds one or more Tier 1 RO

TABLE 3-5
TIER 1 COMPARISON - BTEX AND PAH RESULTS FOR GREATER THAN 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remediation Objectives - Soil											B-823	B-827	B-829	B-833	B-833
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to Groundwater	*MSA Background*	UNITS/	B823 (13.0-15.0')	B827 (12.0-13.0')	B829 (21.0-22.0')	B833(10.0-12.0')	B833(25.0-26.0')
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)	Metropolitan Areas	DEPTH	4/1/2008 13.0-15.0	4/2/2008 12.0-13.0	4/2/2008 21.0-22.0	4/2/2008 10.0-12.0	4/2/2008 25.0-26.0
Benzene	12.0	100	2,300	0.80	1.60	2.20	0.069	0.51	0.030	--	(mg/kg)	0.0024	0.0048	14.0	15.3	3.19
Ethylbenzene	7,800	200,000	20,000	400	400	58.0	130.0	130.0	13.0	--	(mg/kg)	0.0058	0.0073	<0.0056	6.810	7.16
Toluene	16,000	410,000	410,000	650	650	42.0	240.0	240.0	12.0	--	(mg/kg)	0.0049	0.0084	0.0023	42.90	29.4
Xylene (total)	16,000	410,000	41,000	410	320	5.6	63.0	100.0	150.0	--	(mg/kg)	0.0087	0.0141	0.0021	68.20	75.1
Acenaphthene	4,700	120,000	120,000	-----	-----	-----	-----	-----	570.0	0.130	(mg/kg)	0.160	0.184	<0.004	10.1	0.091
Acenaphthylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	24.0(1)	0.070	(mg/kg)	0.471	0.354	<0.004	41.50	0.669
Anthracene	23,000	610,000	610,000	-----	-----	-----	-----	-----	12,000	0.400	(mg/kg)	0.602	0.056	<0.004	35.0	0.078
Benzo(a)anthracene	0.90	8.0	170.0	-----	-----	-----	-----	-----	2.0	1.800	(mg/kg)	0.559	0.131	<0.004	20.5	0.013
Benzo(a)pyrene	0.09	0.80	17.0	-----	-----	-----	-----	-----	8.0	2.100	(mg/kg)	0.570	0.074	<0.004	14.9	0.009
Benzo(b)fluoranthene	0.90	8.0	170.0	-----	-----	-----	-----	-----	5.0	2.100	(mg/kg)	0.279	0.076	<0.004	15.5	0.01
Benzo(ghi)perylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	32,000(1)	1.700	(mg/kg)	0.247	0.038	<0.004	4.68	0.006
Benzo(k)fluoranthene	9.0	78.0	1,700	-----	-----	-----	-----	-----	49.0	1.700	(mg/kg)	0.297	0.028	<0.004	6.04	0.004
Chrysene	88.0	780.0	17,000	-----	-----	-----	-----	-----	160.0	2.700	(mg/kg)	0.524	0.131	<0.004	19.30	0.012
Dibenzo(a,h)anthracene	0.09	0.80	17.0	-----	-----	-----	-----	-----	2.0	0.420	(mg/kg)	0.064	0.010	<0.004	2.20	<0.004
Fluoranthene	3,100	82,000	82,000	-----	-----	-----	-----	-----	4,300	4.100	(mg/kg)	0.983	0.402	<0.004	52.7	0.038
Fluorene	3,100	82,000	82,000	-----	-----	-----	-----	-----	560.0	0.180	(mg/kg)	0.516	0.366	<0.004	44.9	0.299
Indeno(1,2,3-cd)pyrene	0.90	8.0	170.0	-----	-----	-----	-----	-----	14.0	1.600	(mg/kg)	0.193	0.031	<0.004	5.10	0.004
Naphthalene	1,600	41,000	4,100	170	270	1.80	34.0	34.0	12.0	0.200	(mg/kg)	<0.020	0.009	<0.004	201.0	4.64
Phenanthrene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	220(1)	2.500	(mg/kg)	2.48	0.023	<0.004	106.0	0.249
Pyrene	2,300	61,000	61,000	-----	-----	-----	-----	-----	4,200	3.000	(mg/kg)	1.49	0.553	<0.004	45.0	0.031

Notes:

mg/kg	Milligrams per kilogram
(1)	Provisional remediation objective provided by IEPA
-----	No remediation objective has been established by the IEPA for this constituent for this exposure route
<12	Not detected at the level identified
	Analytical result exceeds one or more Tier 1 RO

TABLE 3-5
TIER 1 COMPARISON - BTEX AND PAH RESULTS FOR GREATER THAN 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remediation Objectives - Soil											B-833	B-835	B-501	B-501	B-502	B-502
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to Groundwater	*MSA Background*	UNITS/	B833(31.0-32.0')	B835 (28.0-29.0')	B-501-15	B-501-24	B-502-12	B-502-24
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)	Metropolitan Areas	DEPTH	4/2/2008 31.0-32.0	4/3/2008 29.0-29.0	7/13/2004 14'-15'	7/13/2004 23'-24'	7/13/2004 11'-12'	7/21/2004 23'-24'
Benzene	12.0	100	2,300	0.80	1.60	2.20	0.069	0.51	0.030	--	(mg/kg)	0.006	29.6	16.40	0.0016	30.3	0.423
Ethylbenzene	7,800	200,000	20,000	400	400	58.0	130.0	130.0	13.0	--	(mg/kg)	0.0013	15.20	2.42	<0.0037	25.3	<0.0192
Toluene	16,000	410,000	410,000	650	650	42.0	240.0	240.0	12.0	--	(mg/kg)	0.0056	59.10	6.90	0.0016	108.0	<0.0192
Xylene (total)	16,000	410,000	41,000	410	320	5.6	63.0	100.0	150.0	--	(mg/kg)	0.0037	78.10	16.9	0.002	226.0	<0.0192
Acenaphthene	4,700	120,000	120,000	-----	-----	-----	-----	-----	570.0	0.130	(mg/kg)	0.021	2.47	38.60	<0.388	36.0	<0.011
Acenaphthylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	24.0(1)	0.070	(mg/kg)	0.023	13.0	57.70	<0.388	50.30	<0.011
Anthracene	23,000	610,000	610,000	-----	-----	-----	-----	-----	12,000	0.400	(mg/kg)	0.043	8.24	130.0	<0.388	64.50	<0.011
Benzo(a)anthracene	0.90	8.0	170.0	-----	-----	-----	-----	-----	2.0	1.800	(mg/kg)	0.035	6.06	66.80	<0.388	54.50	<0.011
Benzo(a)pyrene	0.09	0.80	17.0	-----	-----	-----	-----	-----	8.0	2.100	(mg/kg)	0.027	4.99	68.40	<0.388	48.30	<0.011
Benzo(b)fluoranthene	0.90	8.0	170.0	-----	-----	-----	-----	-----	5.0	2.100	(mg/kg)	0.029	3.41	72.50	<0.388	56.0	<0.011
Benzo(ghi)perylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	32,000(1)	1.700	(mg/kg)	0.014	1.94	22.0	<0.388	13.0	<0.011
Benzo(k)fluoranthene	9.0	78.0	1,700	-----	-----	-----	-----	-----	49.0	1.700	(mg/kg)	0.011	3.92	21.0	<0.388	17.0	<0.011
Chrysene	88.0	780.0	17,000	-----	-----	-----	-----	-----	160.0	2.700	(mg/kg)	0.034	5.22	63.50	<0.388	55.70	<0.011
Dibenzo(a,h)anthracene	0.09	0.80	17.0	-----	-----	-----	-----	-----	2.0	0.420	(mg/kg)	0.004	0.702	7.3	<0.388	5.5	<0.011
Fluoranthene	3,100	82,000	82,000	-----	-----	-----	-----	-----	4,300	4.100	(mg/kg)	0.087	15.3	162.0	<0.388	144.00	<0.011
Fluorene	3,100	82,000	82,000	-----	-----	-----	-----	-----	560.0	0.180	(mg/kg)	0.036	9.55	124.0	<0.388	115.0	<0.011
Indeno(1,2,3-cd)pyrene	0.90	8.0	170.0	-----	-----	-----	-----	-----	14.0	1.600	(mg/kg)	0.011	2.09	24.0	<0.388	17.0	<0.011
Naphthalene	1,600	41,000	4,100	170	270	1.80	34.0	34.0	12.0	0.200	(mg/kg)	0.072	56.0	920.0	<0.388	682.0	0.026
Phenanthrene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	220(1)	2.500	(mg/kg)	0.143	25.2	346.0	<0.388	271.0	<0.011
Pyrene	2,300	61,000	61,000	-----	-----	-----	-----	-----	4,200	3.000	(mg/kg)	0.083	12.2	165.0	<0.555	113.0	<0.011

Notes:
- mg/kg — Milligrams per kilogram
- (1) — Provisional remediation objective provided by IEPA
- ----- — No remediation objective has been established by the IEPA for this constitiuent for this exposure route
- <12 — Not detected at the level identified
- Analytical result exceeds one or more Tier 1 RO

TABLE 3-5
TIER 1 COMPARISON - BTEX AND PAH RESULTS FOR GREATER THAN 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remediation Objectives - Soil											B-503	B-503	B-504	B-504	B-504	B-505	B-505
		Ingestion			*Inhalation*			*Indoor Inhalation*		Soil Component	*MSA Background*		B-503-11	B-503-19	B-504-14	B-504-21	B-504-28	B-505-11	B-505-22
										to Groundwater	Metropolitan	UNITS/	7/13/2004	7/13/2004	7/13/2004	7/14/2004	7/14/2004	7/14/2004	7/14/2004
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)	Areas	DEPTH	10'-11'	18'-19'	13'-14'	20'-21'	27'-28'	10'-11'	21'-22'
Benzene	12.0	100	2,300	0.80	1.60	2.20	0.069	0.51	0.030	--	(mg/kg)	0.223	3.0	15.10	33.10	0.0091	5.04	0.0016
Ethylbenzene	7,800	200,000	20,000	400	400	58.0	130.0	130.0	13.0	--	(mg/kg)	0.372	<0.528	28.5	1.10	0.002	17.70	0.0015
Toluene	16,000	410,000	410,000	650	650	42.0	240.0	240.0	12.0	--	(mg/kg)	0.12	0.835	8.24	8.76	0.0037	0.72	0.0043
Xylene (total)	16,000	410,000	41,000	410	320	5.6	63.0	100.0	150.0	--	(mg/kg)	0.458	<0.528	24.0	3.46	0.0034	11.20	0.0042
Acenaphthene	4,700	120,000	120,000	-----	-----	-----	-----	-----	570.0	0.130	(mg/kg)	<0.421	5.43	48.70	21.50	0.013	13.40	<0.109
Acenaphthylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	24.0(1)	0.070	(mg/kg)	<0.421	46.90	19.80	148.0	0.014	13.80	0.012
Anthracene	23,000	610,000	610,000	-----	-----	-----	-----	-----	12,000	0.400	(mg/kg)	<0.421	12.40	33.50	107.0	0.022	11.00	<0.109
Benzo(a)anthracene	0.90	8.0	170.0	-----	-----	-----	-----	-----	2.0	1.800	(mg/kg)	<0.421	31.30	16.60	58.80	0.019	7.50	<0.109
Benzo(a)pyrene	0.09	0.80	17.0	-----	-----	-----	-----	-----	8.0	2.100	(mg/kg)	<0.421	81.50	15.80	66.50	0.019	7.00	<0.109
Benzo(b)fluoranthene	0.90	8.0	170.0	-----	-----	-----	-----	-----	5.0	2.100	(mg/kg)	<0.421	88.10	11.9	50.40	0.015	5.40	<0.109
Benzo(ghi)perylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	32,000(1)	1.700	(mg/kg)	<0.421	23.0	4.9	15.20	<0.111	<11.30	<0.109
Benzo(k)fluoranthene	9.0	78.0	1,700	-----	-----	-----	-----	-----	49.0	1.700	(mg/kg)	<0.421	25.0	4.0	15.70	<0.111	<11.30	<0.109
Chrysene	88.0	780.0	17,000	-----	-----	-----	-----	-----	160.0	2.700	(mg/kg)	<0.421	34.50	16.2	62.30	0.021	6.70	<0.109
Dibenzo(a,h)anthracene	0.09	0.80	17.0	-----	-----	-----	-----	-----	2.0	0.420	(mg/kg)	<0.421	5.8	1.4	4.60	<0.111	<11.30	<0.109
Fluoranthene	3,100	82,000	82,000	-----	-----	-----	-----	-----	4,300	4.100	(mg/kg)	<0.421	37.40	36.30	122.0	0.033	12.20	<0.109
Fluorene	3,100	82,000	82,000	-----	-----	-----	-----	-----	560.0	0.180	(mg/kg)	<0.421	13.30	47.90	123.0	0.022	15.40	<0.109
Indeno(1,2,3-cd)pyrene	0.90	8.0	170.0	-----	-----	-----	-----	-----	14.0	1.600	(mg/kg)	<0.421	21.40	4.7	15.0	<0.111	<11.30	<0.109
Naphthalene	1,600	41,000	4,100	170	270	1.80	34.0	34.0	12.0	0.200	(mg/kg)	<0.421	7.71	231.0	332.0	0.155	113.0	0.16
Phenanthrene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	220(1)	2.500	(mg/kg)	<0.421	17.90	115.0	320.0	0.072	38.60	0.02
Pyrene	2,300	61,000	61,000	-----	-----	-----	-----	-----	4,200	3.000	(mg/kg)	<0.421	59.80	54.0	192.0	0.051	19.70	0.011

Notes:

mg/kg	Milligrams per kilogram
(1)	Provisional remediation objective provided by IEPA
-----	No remediation objective has been established by the IEPA for this constitiuent for this exposure route
<12	Not detected at the level identified
	Analytical result exceeds one or more Tier 1 RO

TABLE 3-5
TIER 1 COMPARISON - BTEX AND PAH RESULTS FOR GREATER THAN 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remediation Objectives - Soil											B-505	B-506	B-506	B-507	B-507	B-508	B-508
		Ingestion			*Inhalation*			*Indoor Inhalation*		Soil Component			B-505-28	B-506-17	B-506-28	B-507-19	B-507-28	B-508-11	B-508-28
										to Groundwater	*MSA Background*	UNITS/	7/14/2004	7/22/2004	7/22/2004	7/21/2004	7/21/2004	7/19/2004	7/19/2004
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)	Metropolitan Areas	DEPTH	27'-28'	16'-17'	27'-28'	18'-19'	27'-28'	10'-11'	27'-28'
Benzene	12.0	100	2,300	0.80	1.60	2.20	0.069	0.51	0.030	--	(mg/kg)	0.003	444.0	0.0023	659.0	0.0061	2.58	0.0014
Ethylbenzene	7,800	200,000	20,000	400	400	58.0	130.0	130.0	13.0	--	(mg/kg)	0.0023	122.0	0.0013	141.0	0.0034	37.10	0.001
Toluene	16,000	410,000	410,000	650	650	42.0	240.0	240.0	12.0	--	(mg/kg)	0.0025	676.0	0.0036	1540.0	0.0143	0.22	0.0017
Xylene (total)	16,000	410,000	41,000	410	320	5.6	63.0	100.0	150.0	--	(mg/kg)	0.004	549.0	0.004	1300.0	0.0091	19.0	0.0017
Acenaphthene	4,700	120,000	120,000	-----	-----	-----	-----	-----	570.0	0.130	(mg/kg)	0.02	54.60	<0.387	115.0	---	47.70	<0.113
Acenaphthylene	2,300[1]	61,000 [1]	61,000 [1]	-----	-----	-----	-----	-----	24.0[1]	0.070	(mg/kg)	0.03	389.0	<0.387	697.0	---	8.10	<0.113
Anthracene	23,000	610,000	610,000	-----	-----	-----	-----	-----	12,000	0.400	(mg/kg)	0.037	155.0	<0.387	406.0	---	24.10	<0.113
Benzo(a)anthracene	0.90	8.0	170.0	-----	-----	-----	-----	-----	2.0	1.800	(mg/kg)	0.029	79.0	<0.387	257.0	---	13.0	<0.113
Benzo(a)pyrene	0.09	0.80	17.0	-----	-----	-----	-----	-----	8.0	2.100	(mg/kg)	0.025	92.0	<0.387	237.0	---	13.0	<0.113
Benzo(b)fluoranthene	0.90	8.0	170.0	-----	-----	-----	-----	-----	5.0	2.100	(mg/kg)	0.02	72.6	<0.387	170.0	---	11.0	<0.113
Benzo(ghi)perylene	2,300[1]	61,000 [1]	61,000 [1]	-----	-----	-----	-----	-----	32,000[1]	1.700	(mg/kg)	<0.112	17.7	<0.387	80.0	---	4.90	<0.113
Benzo(k)fluoranthene	9.0	78.0	1,700	-----	-----	-----	-----	-----	49.0	1.700	(mg/kg)	<0.112	21.8	<0.387	69.6	---	3.30	<0.113
Chrysene	88.0	780.0	17,000	-----	-----	-----	-----	-----	160.0	2.700	(mg/kg)	0.026	72.5	<0.387	239.0	---	12.0	<0.113
Dibenzo(a,h)anthracene	0.09	0.80	17.0	-----	-----	-----	-----	-----	2.0	0.420	(mg/kg)	<0.112	5.64	<0.387	<54.30	---	<24.60	<0.113
Fluoranthene	3,100	82,000	82,000	-----	-----	-----	-----	-----	4,300	4.100	(mg/kg)	0.051	168.0	<0.387	485.0	---	27.0	<0.113
Fluorene	3,100	82,000	82,000	-----	-----	-----	-----	-----	560.0	0.180	(mg/kg)	0.044	204.0	<0.387	547.0	---	35.0	<0.113
Indeno(1,2,3-cd)pyrene	0.90	8.0	170.0	-----	-----	-----	-----	-----	14.0	1.600	(mg/kg)	<0.112	17.3	<0.387	64.0	---	4.30	<0.113
Naphthalene	1,600	41,000	4,100	170	270	1.80	34.0	34.0	12.0	0.200	(mg/kg)	0.179	2160.0	<0.387	4620.0	---	193.0	0.030
Phenanthrene	2,300[1]	61,000 [1]	61,000 [1]	-----	-----	-----	-----	-----	220[1]	2.500	(mg/kg)	0.13	613.0	<0.387	935.0	---	78.30	0.019
Pyrene	2,300	61,000	61,000	-----	-----	-----	-----	-----	4,200	3.000	(mg/kg)	0.078	244.0	<0.553	713.0	---	38.80	<0.113

Notes:
- mg/kg — Milligrams per kilogram
- (1) — Provisional remediation objective provided by IEPA
- ----- — No remediation objective has been established by the IEPA for this constitiuent for this exposure route
- <12 — Not detected at the level identified
- Analytical result exceeds one or more Tier 1 RO

TABLE 3-5
TIER 1 COMPARISON - BTEX AND PAH RESULTS FOR GREATER THAN 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remediation Objectives - Soil											B-509	B-509	B-510	B-510	B-512	B-512	B-513
		Ingestion			*Inhalation*			*Indoor Inhalation*		Soil Component	*MSA Background*		B-509-18	B-509-28	B-510-12	B-510-28	B-512-11	B-512-24	B-513-12
										to Groundwater		UNITS/	7/21/2004	7/21/2004	7/12/2004	7/12/2004	7/12/2004	7/12/2004	7/12/2004
CONSTITUENT	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**	**(Class I)**	**Metropolitan Areas**	**DEPTH**	**17'-18'**	**27'-28'**	**11'-12'**	**27'-28'**	**10'-11'**	**23'-24'**	**11'-12'**
Benzene	12.0	100	2,300	0.80	1.60	2.20	0.069	0.51	0.030	--	(mg/kg)	6.25	0.0007	0.0013	0.001	0.009	0.0012	1.8
Ethylbenzene	7,800	200,000	20,000	400	400	58.0	130.0	130.0	13.0	--	(mg/kg)	11.4	<0.004	<0.0039	<0.0043	<0.0044	<0.0037	1.5
Toluene	16,000	410,000	410,000	650	650	42.0	240.0	240.0	12.0	--	(mg/kg)	0.55	0.002	0.0018	0.0012	0.0011	0.0012	3.7
Xylene (total)	16,000	410,000	41,000	410	320	5.6	63.0	100.0	150.0	--	(mg/kg)	6.63	0.0027	0.001	0.0014	0.0018	0.0012	3.5
Acenaphthene	4,700	120,000	120,000	-----	-----	-----	-----	-----	570.0	0.130	(mg/kg)	0.086	0.022	<0.099	<0.097	0.18	<0.101	<0.390
Acenaphthylene	2,300[(1)]	61,000 [(1)]	61,000 [(1)]	-----	-----	-----	-----	-----	24.0[(1)]	0.070	(mg/kg)	0.263	0.11	<0.099	0.010	<0.579	<0.101	<0.390
Anthracene	23,000	610,000	610,000	-----	-----	-----	-----	-----	12,000	0.400	(mg/kg)	0.091	0.098	<0.099	<0.097	0.083	<0.101	<0.390
Benzo(a)anthracene	0.90	8.0	170.0	-----	-----	-----	-----	-----	2.0	1.800	(mg/kg)	0.066	0.072	<0.099	<0.097	<0.579	<0.101	<0.390
Benzo(a)pyrene	0.09	0.80	17.0	-----	-----	-----	-----	-----	8.0	2.100	(mg/kg)	0.074	0.079	<0.099	<0.097	<0.579	<0.101	<0.390
Benzo(b)fluoranthene	0.90	8.0	170.0	-----	-----	-----	-----	-----	5.0	2.100	(mg/kg)	0.053	0.058	<0.099	<0.097	<0.579	<0.101	<0.390
Benzo(ghi)perylene	2,300[(1)]	61,000 [(1)]	61,000 [(1)]	-----	-----	-----	-----	-----	32,000[(1)]	1.700	(mg/kg)	0.036	0.039	<0.099	<0.097	<0.579	<0.101	<0.390
Benzo(k)fluoranthene	9.0	78.0	1,700	-----	-----	-----	-----	-----	49.0	1.700	(mg/kg)	0.016	0.017	<0.099	<0.097	<0.579	<0.101	<0.390
Chrysene	88.0	780.0	17,000	-----	-----	-----	-----	-----	160.0	2.700	(mg/kg)	0.066	0.072	<0.099	<0.097	<0.579	<0.101	<0.390
Dibenzo(a,h)anthracene	0.09	0.80	17.0	-----	-----	-----	-----	-----	2.0	0.420	(mg/kg)	<0.113	<0.112	<0.099	<0.097	<0.579	<0.101	<0.390
Fluoranthene	3,100	82,000	82,000	-----	-----	-----	-----	-----	4,300	4.100	(mg/kg)	0.125	0.142	<0.099	<0.097	0.066	<0.101	<0.390
Fluorene	3,100	82,000	82,000	-----	-----	-----	-----	-----	560.0	0.180	(mg/kg)	0.113	0.09	<0.099	<0.097	0.16	<0.101	<0.390
Indeno(1,2,3-cd)pyrene	0.90	8.0	170.0	-----	-----	-----	-----	-----	14.0	1.600	(mg/kg)	0.027	0.028	<0.099	<0.097	<0.579	<0.101	<0.390
Naphthalene	1,600	41,000	4,100	170	270	1.80	34.0	34.0	12.0	0.200	(mg/kg)	7.94	0.466	<0.099	<0.097	0.1	<0.101	<0.390
Phenanthrene	2,300[(1)]	61,000 [(1)]	61,000 [(1)]	-----	-----	-----	-----	-----	220[(1)]	2.500	(mg/kg)	0.298	0.311	<0.099	<0.097	0.32	<0.101	<0.390
Pyrene	2,300	61,000	61,000	-----	-----	-----	-----	-----	4,200	3.000	(mg/kg)	0.194	0.223	<0.099	<0.097	0.087	<0.101	<0.557

Notes:

mg/kg	Milligrams per kilogram
(1)	Provisional remediation objective provided by IEPA
-----	No remediation objective has been established by the IEPA for this constituent for this exposure route
<12	Not detected at the level identified
	Analytical result exceeds one or more Tier 1 RO

TABLE 3-5
TIER 1 COMPARISON - BTEX AND PAH RESULTS FOR GREATER THAN 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remediation Objectives - Soil											B-513	B-514	B-514	B-515	B-515	B-516	B-516
		Ingestion			*Inhalation*			*Indoor Inhalation*		Soil Component	*MSA Background*		B-513-24	B-514-17	B-514-28	B-515-19	B-515-32	B-516-14	B-516-24
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	to Groundwater (Class I)	Metropolitan Areas	UNITS/ DEPTH	7/12/2004 23'-24'	7/22/2004 16'-17'	7/22/2004 27'-28'	7/16/2004 18'-19'	7/16/2004 31'-32'	7/22/2004 13'-14'	7/22/2004 23'-24'
Benzene	12.0	100	2,300	0.80	1.60	2.20	0.069	0.51	0.030	--	(mg/kg)	0.001	333.0	0.0008	29.3	0.002	5.45	0.0007
Ethylbenzene	7,800	200,000	20,000	400	400	58.0	130.0	130.0	13.0	--	(mg/kg)	<0.0038	797.0	0.0009	5.73	0.014	11.4	<0.004
Toluene	16,000	410,000	410,000	650	650	42.0	240.0	240.0	12.0	--	(mg/kg)	0.001	266.0	0.0014	35.1	0.0022	1.18	0.0011
Xylene (total)	16,000	410,000	41,000	410	320	5.6	63.0	100.0	150.0	--	(mg/kg)	0.001	721.0	0.0018	27.6	0.0024	25.3	0.0015
Acenaphthene	4,700	120,000	120,000	-----	-----	-----	-----	-----	570.0	0.130	(mg/kg)	<0.307	1490	<0.108	3.00	<0.373	1.94	<0.113
Acenaphthylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	24.0(1)	0.070	(mg/kg)	<0.307	402.0	<0.108	26.50	<0.373	2.75	<0.113
Anthracene	23,000	610,000	610,000	-----	-----	-----	-----	-----	12,000	0.400	(mg/kg)	<0.307	602.0	<0.108	11.0	<0.373	5.96	<0.113
Benzo(a)anthracene	0.90	8.0	170.0	-----	-----	-----	-----	-----	2.0	1.800	(mg/kg)	<0.307	254.0	<0.108	5.77	<0.373	3.03	<0.113
Benzo(a)pyrene	0.09	0.80	17.0	-----	-----	-----	-----	-----	8.0	2.100	(mg/kg)	<0.307	292.0	<0.108	6.48	<0.373	3.61	<0.113
Benzo(b)fluoranthene	0.90	8.0	170.0	-----	-----	-----	-----	-----	5.0	2.100	(mg/kg)	<0.307	202.0	<0.108	4.50	<0.373	2.50	<0.113
Benzo(ghi)perylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	32,000(1)	1.700	(mg/kg)	<0.307	101.0	<0.108	2.10	<0.373	1.19	<0.113
Benzo(k)fluoranthene	9.0	78.0	1,700	-----	-----	-----	-----	-----	49.0	1.700	(mg/kg)	<0.307	59.0	<0.108	1.60	<0.373	0.851	<0.113
Chrysene	88.0	780.0	17,000	-----	-----	-----	-----	-----	160.0	2.700	(mg/kg)	<0.307	263.0	<0.108	5.93	<0.373	2.85	<0.113
Dibenzo(a,h)anthracene	0.09	0.80	17.0	-----	-----	-----	-----	-----	2.0	0.420	(mg/kg)	<0.307	26.0	<0.108	0.57	<0.373	0.40	<0.113
Fluoranthene	3,100	82,000	82,000	-----	-----	-----	-----	-----	4,300	4.100	(mg/kg)	<0.307	660.0	<0.108	12.90	<0.373	7.32	<0.113
Fluorene	3,100	82,000	82,000	-----	-----	-----	-----	-----	560.0	0.180	(mg/kg)	<0.307	836.0	<0.108	16.10	<0.373	6.76	<0.113
Indeno(1,2,3-cd)pyrene	0.90	8.0	170.0	-----	-----	-----	-----	-----	14.0	1.600	(mg/kg)	<0.307	84.5	<0.108	1.90	<0.373	1.09	<0.113
Naphthalene	1,600	41,000	4,100	170	270	1.80	34.0	34.0	12.0	0.200	(mg/kg)	<0.307	7660	0.085	86.0	<0.373	126.0	0.057
Phenanthrene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	220(1)	2.500	(mg/kg)	<0.307	2410	<0.108	38.10	<0.373	18.0	0.018
Pyrene	2,300	61,000	61,000	-----	-----	-----	-----	-----	4,200	3.000	(mg/kg)	<0.307	1030	<0.108	19.70	<0.533	9.53	0.012

Notes:
- mg/kg — Milligrams per kilogram
- (1) — Provisional remediation objective provided by IEPA
- ----- — No remediation objective has been established by the IEPA for this constitiuent for this exposure route
- <12 — Not detected at the level identified
- Analytical result exceeds one or more Tier 1 RO

TABLE 3-5
TIER 1 COMPARISON - BTEX AND PAH RESULTS FOR GREATER THAN 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remediation Objectives - Soil											B-550	B-550	B-550	B-551	B-551	B-553	B-553
		Ingestion			*Inhalation*			*Indoor Inhalation*		Soil Component			B-550-11	B-550-16	B-550-28	B-551-16	B-551-28	B-553-15	B-553-24
										to Groundwater	*MSA Background*	UNITS/	7/20/2004	7/20/2004	7/20/2004	7/15/2004	7/15/2004	7/14/2004	7/14/2004
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)	Metropolitan Areas	DEPTH	10'-11'	15'-16'	27'-28'	15'-16'	27'-28'	14'-15'	23'-24'
Benzene	12.0	100	2,300	0.80	1.60	2.20	0.069	0.51	0.030	--	(mg/kg)	1.24	5.81	0.0011	0.0148	0.0026	3.03	97.30
Ethylbenzene	7,800	200,000	20,000	400	400	58.0	130.0	130.0	13.0	--	(mg/kg)	4.02	1.44	<0.0039	0.042	0.0033	10.1	32.90
Toluene	16,000	410,000	410,000	650	650	42.0	240.0	240.0	12.0	--	(mg/kg)	0.150	0.798	0.0018	0.0736	0.0034	16.1	164.0
Xylene (total)	16,000	410,000	41,000	410	320	5.6	63.0	100.0	150.0	--	(mg/kg)	1.93	1.43	0.0014	0.128	0.0056	37.3	155.0
Acenaphthene	4,700	120,000	120,000	-----	-----	-----	-----	-----	570.0	0.130	(mg/kg)	35.60	0.050	<0.111	0.013	0.038	15.70	101.0
Acenaphthylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	24.0(1)	0.070	(mg/kg)	4.66	0.020	<0.111	0.080	<0.112	35.60	664.0
Anthracene	23,000	610,000	610,000	-----	-----	-----	-----	-----	12,000	0.400	(mg/kg)	18.40	0.054	<0.111	0.021	0.037	77.90	371.0
Benzo(a)anthracene	0.90	8.0	170.0	-----	-----	-----	-----	-----	2.0	1.800	(mg/kg)	6.74	0.040	<0.111	0.027	0.032	50.80	188.0
Benzo(a)pyrene	0.09	0.80	17.0	-----	-----	-----	-----	-----	8.0	2.100	(mg/kg)	7.48	0.034	<0.111	0.023	0.029	53.20	194.0
Benzo(b)fluoranthene	0.90	8.0	170.0	-----	-----	-----	-----	-----	5.0	2.100	(mg/kg)	4.89	0.032	<0.111	0.02	0.027	56.10	154.0
Benzo(ghi)perylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	32,000(1)	1.700	(mg/kg)	2.05	0.011	<0.111	<0.113	0.013	11.50	57.80
Benzo(k)fluoranthene	9.0	78.0	1,700	-----	-----	-----	-----	-----	49.0	1.700	(mg/kg)	1.42	<0.111	<0.111	<0.113	<0.112	20.50	49.0
Chrysene	88.0	780.0	17,000	-----	-----	-----	-----	-----	160.0	2.700	(mg/kg)	6.49	0.040	<0.111	0.026	0.031	47.30	197.0
Dibenzo(a,h)anthracene	0.09	0.80	17.0	-----	-----	-----	-----	-----	2.0	0.420	(mg/kg)	0.61	<0.111	<0.111	<0.113	<0.112	4.0	17.0
Fluoranthene	3,100	82,000	82,000	-----	-----	-----	-----	-----	4,300	4.100	(mg/kg)	16.40	0.077	<0.111	0.04	0.058	133.0	417.0
Fluorene	3,100	82,000	82,000	-----	-----	-----	-----	-----	560.0	0.180	(mg/kg)	24.30	0.050	<0.111	0.019	0.036	64.90	555.0
Indeno(1,2,3-cd)pyrene	0.90	8.0	170.0	-----	-----	-----	-----	-----	14.0	1.600	(mg/kg)	1.810	<0.111	<0.111	<0.113	<0.112	13.60	52.0
Naphthalene	1,600	41,000	4,100	170	270	1.80	34.0	34.0	12.0	0.200	(mg/kg)	35.400	0.258	0.061	1.51	0.082	523.0	26.5
Phenanthrene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	220(1)	2.500	(mg/kg)	49.0	0.170	0.021	0.066	0.121	224.0	985.0
Pyrene	2,300	61,000	61,000	-----	-----	-----	-----	-----	4,200	3.000	(mg/kg)	20.0	0.010	<0.111	0.058	0.076	138.0	588.0

Notes:

mg/kg	Milligrams per kilogram
(1)	Provisional remediation objective provided by IEPA
-----	No remediation objective has been established by the IEPA for this constitiuent for this exposure route
<12	Not detected at the level identified
	Analytical result exceeds one or more Tier 1 RO

TABLE 3-5
TIER 1 COMPARISON - BTEX AND PAH RESULTS FOR GREATER THAN 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remediation Objectives - Soil											B-553	B-554	B-554	B-556	B-556	B-557	B-557
		Ingestion			*Inhalation*			*Indoor Inhalation*		Soil Component	*MSA Background*		B-553-32	B-554-18	B-554-32	B-556-20	B-556-28	B-557-12	B-557-24
CONSTITUENT	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**	**to Groundwater (Class I)**	**Metropolitan Areas**	**UNITS/ DEPTH**	**7/14/2004 31'-32'**	**7/15/2004 17'-18'**	**7/15/2004 31'-32'**	**7/20/2004 19'-20'**	**7/20/2004 27'-28'**	**7/20/2004 11'-12'**	**7/20/2004 23'-24'**
Benzene	12.0	100	2,300	0.80	1.60	2.20	0.069	0.51	0.030	--	(mg/kg)	0.0035	5.62	0.0037	3.35	0.0021	0.0308	0.0009
Ethylbenzene	7,800	200,000	20,000	400	400	58.0	130.0	130.0	13.0	--	(mg/kg)	0.0015	9.02	0.0048	4.51	0.0023	1.03	<0.0043
Toluene	16,000	410,000	410,000	650	650	42.0	240.0	240.0	12.0	--	(mg/kg)	0.0045	7.78	0.0095	10.40	0.005	0.0099	0.0011
Xylene (total)	16,000	410,000	41,000	410	320	5.6	63.0	100.0	150.0	--	(mg/kg)	0.0036	13.0	0.0178	13.90	0.0046	0.532	0.0012
Acenaphthene	4,700	120,000	120,000	-----	-----	-----	-----	-----	570.0	0.130	(mg/kg)	<0.382	98.90	<0.112	11.70	<0.375	6.22	0.023
Acenaphthylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	24.0(1)	0.070	(mg/kg)	<0.382	230.0	<0.112	51.80	<0.375	1.49	<0.113
Anthracene	23,000	610,000	610,000	-----	-----	-----	-----	-----	12,000	0.400	(mg/kg)	<0.382	172.0	<0.112	27.70	<0.375	4.24	0.023
Benzo(a)anthracene	0.90	8.0	170.0	-----	-----	-----	-----	-----	2.0	1.800	(mg/kg)	<0.382	78.20	<0.112	13.30	<0.375	2.30	0.017
Benzo(a)pyrene	0.09	0.80	17.0	-----	-----	-----	-----	-----	8.0	2.100	(mg/kg)	<0.382	86.0	<0.112	17.30	<0.375	1.90	0.014
Benzo(b)fluoranthene	0.90	8.0	170.0	-----	-----	-----	-----	-----	5.0	2.100	(mg/kg)	<0.382	73.50	<0.112	10.70	<0.375	1.55	0.012
Benzo(ghi)perylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	32,000(1)	1.700	(mg/kg)	<0.382	13.0	<0.112	3.01	<0.375	0.50	<0.113
Benzo(k)fluoranthene	9.0	78.0	1,700	-----	-----	-----	-----	-----	49.0	1.700	(mg/kg)	<0.382	26.0	<0.112	3.31	<0.375	0.45	<0.113
Chrysene	88.0	780.0	17,000	-----	-----	-----	-----	-----	160.0	2.700	(mg/kg)	<0.382	79.10	<0.112	13.50	<0.375	2.09	0.016
Dibenzo(a,h)anthracene	0.09	0.80	17.0	-----	-----	-----	-----	-----	2.0	0.420	(mg/kg)	<0.382	<50.90	<0.112	0.96	<0.375	<0.865	<0.113
Fluoranthene	3,100	82,000	82,000	-----	-----	-----	-----	-----	4,300	4.100	(mg/kg)	<0.382	173.0	<0.112	30.50	<0.375	4.25	0.027
Fluorene	3,100	82,000	82,000	-----	-----	-----	-----	-----	560.0	0.180	(mg/kg)	<0.382	241.0	<0.112	30.90	<0.375	5.26	0.020
Indeno(1,2,3-cd)pyrene	0.90	8.0	170.0	-----	-----	-----	-----	-----	14.0	1.600	(mg/kg)	<0.382	14.0	<0.112	2.82	<0.375	0.41	<0.113
Naphthalene	1,600	41,000	4,100	170	270	1.80	34.0	34.0	12.0	0.200	(mg/kg)	<0.382	1070	0.057	239.00	<0.375	0.45	0.053
Phenanthrene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	220(1)	2.500	(mg/kg)	<0.382	593.0	0.025	90.00	<0.375	11.50	0.070
Pyrene	2,300	61,000	61,000	-----	-----	-----	-----	-----	4,200	3.000	(mg/kg)	<0.545	242.0	0.011	47.30	<0.536	6.40	0.040

Notes:
- mg/kg — Milligrams per kilogram
- (1) — Provisional remediation objective provided by IEPA
- ----- — No remediation objective has been established by the IEPA for this constitiuent for this exposure route
- <12 — Not detected at the level identified
- Analytical result exceeds one or more Tier 1 RO

TABLE 3-5
TIER 1 COMPARISON - BTEX AND PAH RESULTS FOR GREATER THAN 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remediation Objectives - Soil											UTB-14	UTB-15	UTB-16	UTB-20	UTB-21	UTB-22	UTB-23
		Ingestion			*Inhalation*			*Indoor Inhalation*		Soil Component	*MSA Background*		UTB-14-02	UTB-15-S02	UTB-16-02	UTB-20-S01	UTB-21-S02	UTB-22-S02	UTB-23-S02
CONSTITUENT	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**	**to Groundwater (Class I)**	**Metropolitan Areas**	**UNITS/ DEPTH**	**12/6/1990 32'-33'**	**12/13/1991 33'-35'**	**12/6/1990 16.5'-18'**	**12/11/1991 17'-18'**	**12/12/1991 20'-23'**	**12/12/1991 20'-23'**	**12/14/1991 26'-28'**
Benzene	12.0	100	2,300	0.80	1.60	2.20	0.069	0.51	0.030	--	(mg/kg)	<0.310	<0.310	<0.310	<0.310	<0.310	<0.310	0.73
Ethylbenzene	7,800	200,000	20,000	400	400	58.0	130.0	130.0	13.0	--	(mg/kg)	<0.310	<0.310	<0.310	<0.310	<0.310	<0.310	<0.310
Toluene	16,000	410,000	410,000	650	650	42.0	240.0	240.0	12.0	--	(mg/kg)	<0.310	<0.310	<0.310	<0.310	<0.310	<0.310	<0.310
Xylene (total)	16,000	410,000	41,000	410	320	5.6	63.0	100.0	150.0	--	(mg/kg)	<0.310	<0.310	<0.310	<0.310	<0.310	<0.310	<0.310
Acenaphthene	4,700	120,000	120,000	-----	-----	-----	-----	-----	570.0	0.130	(mg/kg)	<0.330	2.70	<0.330	<0.330	<0.330	<0.330	<0.330
Acenaphthylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	24.0(1)	0.070	(mg/kg)	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330
Anthracene	23,000	610,000	610,000	-----	-----	-----	-----	-----	12,000	0.400	(mg/kg)	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330
Benzo(a)anthracene	0.90	8.0	170.0	-----	-----	-----	-----	-----	2.0	1.800	(mg/kg)	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330
Benzo(a)pyrene	0.09	0.80	17.0	-----	-----	-----	-----	-----	8.0	2.100	(mg/kg)	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330
Benzo(b)fluoranthene	0.90	8.0	170.0	-----	-----	-----	-----	-----	5.0	2.100	(mg/kg)	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330
Benzo(ghi)perylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	32,000(1)	1.700	(mg/kg)	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330
Benzo(k)fluoranthene	9.0	78.0	1,700	-----	-----	-----	-----	-----	49.0	1.700	(mg/kg)	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330
Chrysene	88.0	780.0	17,000	-----	-----	-----	-----	-----	160.0	2.700	(mg/kg)	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330
Dibenzo(a,h)anthracene	0.09	0.80	17.0	-----	-----	-----	-----	-----	2.0	0.420	(mg/kg)	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330
Fluoranthene	3,100	82,000	82,000	-----	-----	-----	-----	-----	4,300	4.100	(mg/kg)	<0.330	0.220	<0.330	<0.330	<0.330	<0.330	<0.330
Fluorene	3,100	82,000	82,000	-----	-----	-----	-----	-----	560.0	0.180	(mg/kg)	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330
Indeno(1,2,3-cd)pyrene	0.90	8.0	170.0	-----	-----	-----	-----	-----	14.0	1.600	(mg/kg)	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330	<0.330
Naphthalene	1,600	41,000	4,100	170	270	1.80	34.0	34.0	12.0	0.200	(mg/kg)	<0.330	1.30	<0.330	<0.330	0.18	<0.330	<0.330
Phenanthrene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	220(1)	2.500	(mg/kg)	<0.330	0.470	<0.330	<0.330	<0.330	<0.330	<0.330
Pyrene	2,300	61,000	61,000	-----	-----	-----	-----	-----	4,200	3.000	(mg/kg)	<0.330	0.220	<0.330	<0.330	<0.330	<0.330	<0.330

Notes:

mg/kg	Milligrams per kilogram
(1)	Provisional remediation objective provided by IEPA
-----	No remediation objective has been established by the IEPA for this constituent for this exposure route
<12	Not detected at the level identified
	Analytical result exceeds one or more Tier 1 RO

TABLE 3-5
TIER 1 COMPARISON - BTEX AND PAH RESULTS FOR GREATER THAN 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remediation Objectives - Soil											UTB-24	UTB-25	UTB-26	UTB-27
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to Groundwater	*MSA Background*		UTB-24-S02	UTB-25-S02	UTB-26-S02	UTB-27-S02
CONSTITUENT	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**	**(Class I)**	**Metropolitan Areas**	**UNITS/ DEPTH**	**12/15/1991 21'-23'**	**12/14/1991 26'-28'**	**12/15/1991 21'-23'**	**12/16/1991 21'-23'**
Benzene	12.0	100	2,300	0.80	1.60	2.20	0.069	0.51	0.030	--	(mg/kg)	0.61	<0.310	<0.310	2.6
Ethylbenzene	7,800	200,000	20,000	400	400	58.0	130.0	130.0	13.0	--	(mg/kg)	<0.310	<0.310	<0.310	<0.310
Toluene	16,000	410,000	410,000	650	650	42.0	240.0	240.0	12.0	--	(mg/kg)	<0.310	<0.310	<0.310	<0.310
Xylene (total)	16,000	410,000	41,000	410	320	5.6	63.0	100.0	150.0	--	(mg/kg)	<0.310	<0.310	<0.310	<0.310
Acenaphthene	4,700	120,000	120,000	-----	-----	-----	-----	-----	570.0	0.130	(mg/kg)	<0.330	<0.330	<0.330	<0.330
Acenaphthylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	24.0(1)	0.070	(mg/kg)	<0.330	<0.330	<0.330	<0.330
Anthracene	23,000	610,000	610,000	-----	-----	-----	-----	-----	12,000	0.400	(mg/kg)	<0.330	<0.330	<0.330	<0.330
Benzo(a)anthracene	0.90	8.0	170.0	-----	-----	-----	-----	-----	2.0	1.800	(mg/kg)	<0.330	<0.330	<0.330	<0.330
Benzo(a)pyrene	0.09	0.80	17.0	-----	-----	-----	-----	-----	8.0	2.100	(mg/kg)	<0.330	<0.330	<0.330	<0.330
Benzo(b)fluoranthene	0.90	8.0	170.0	-----	-----	-----	-----	-----	5.0	2.100	(mg/kg)	<0.330	<0.330	<0.330	<0.330
Benzo(ghi)perylene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	32,000(1)	1.700	(mg/kg)	<0.330	<0.330	<0.330	<0.330
Benzo(k)fluoranthene	9.0	78.0	1,700	-----	-----	-----	-----	-----	49.0	1.700	(mg/kg)	<0.330	<0.330	<0.330	<0.330
Chrysene	88.0	780.0	17,000	-----	-----	-----	-----	-----	160.0	2.700	(mg/kg)	<0.330	<0.330	<0.330	<0.330
Dibenzo(a,h)anthracene	0.09	0.80	17.0	-----	-----	-----	-----	-----	2.0	0.420	(mg/kg)	<0.330	<0.330	<0.330	<0.330
Fluoranthene	3,100	82,000	82,000	-----	-----	-----	-----	-----	4,300	4.100	(mg/kg)	0.23	<0.330	<0.330	<0.330
Fluorene	3,100	82,000	82,000	-----	-----	-----	-----	-----	560.0	0.180	(mg/kg)	<0.330	<0.330	<0.330	<0.330
Indeno(1,2,3-cd)pyrene	0.90	8.0	170.0	-----	-----	-----	-----	-----	14.0	1.600	(mg/kg)	<0.330	<0.330	<0.330	<0.330
Naphthalene	1,600	41,000	4,100	170	270	1.80	34.0	34.0	12.0	0.200	(mg/kg)	0.76	0.39	<0.330	<0.330
Phenanthrene	2,300(1)	61,000 (1)	61,000 (1)	-----	-----	-----	-----	-----	220(1)	2.500	(mg/kg)	0.52	<0.330	<0.330	<0.330
Pyrene	2,300	61,000	61,000	-----	-----	-----	-----	-----	4,200	3.000	(mg/kg)	0.31	<0.330	<0.330	<0.330

Notes:	mg/kg	Milligrams per kilogram
	(1)	Provisional remediation objective provided by IEPA
	-----	No remediation objective has been established by the IEPA for this constituent for this exposure route
	<12	Not detected at the level identified
		Analytical result exceeds one or more Tier 1 RO

TABLE 3-6
TIER 1 COMPARISON VOC RESULTS FOR 0 TO 3 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remediation Objectives - Soil								Soil Component to GW		B-503 B-503-3 7/13/2004	B-510 B-510-2 7/12/2004	B-514 B-514-3 7/22/2004	B-550 B-550-3 7/20/2004	B-554 B-554-3 7/15/2004
	Ingestion			*Inhalation*			*Indoor Inhalation*								
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)	UNITS	2'-3'	1'-2'	2'-3'	2'-3'	2'-3'
1,1,1-Trichloroethane	---	---	---	1,200	1,200	1,200	560	560	2	(mg/kg)	<0.173	<0.0012	<0.0012	<0.0016	<0.036
1,1,2,2-Tetrachloroethane	2,300	61,000	61,000	1,000	1,000	1,000	---	---	2	(mg/kg)	<0.173	<0.0012	<0.0012	<0.0016	<0.036
1,1,2-Trichloroethane	310	8,200	8,200	1,800	1,800	1,800	900	900	0.02	(mg/kg)	<0.173	<0.0012	<0.0012	<0.0016	<0.036
1,1-Dichloroethane	7,800	200,000	200,000	1,300	1,700	130	110	670	23	(mg/kg)	<0.173	<0.0012	<0.0012	<0.0016	<0.036
1,1-Dichloroethylene	700	18,000	18,000	15,000	15,000	300	13	77	0.06	(mg/kg)	<0.173	<0.0012	<0.0012	<0.0016	<0.036
1,2-Dichloroethane	7	63	1,400	0.4	0.7	0.99	0.066	0.48	0.2	(mg/kg)	<0.173	<0.0012	<0.0012	<0.0016	<0.036
1,2-Dichloropropane	9	84	1,800	15	23	0.5	0.023	0.17	0.03	(mg/kg)	<0.173	<0.0012	<0.0012	<0.0016	<0.036
2-Hexanone	3100(1)	82000(1)	8200(1)	70(1)	110(1)	0.72(1)	---	---	1.3(1)	(mg/kg)	<1.73	<0.0122	<0.01178	<0.0155	<0.036
Acetone	7,800	200,000	200,000	100,000	100,000	10,000	100,000	100,000	16	(mg/kg)	<1.73	0.038	0.126	0.212	<0.036
Bromodichloromethane	10	92	2,000	3,000	3,000	3,000	1,400	1,400	0.6	(mg/kg)	<0.173	<0.0012	<0.0012	<0.0016	<0.036
Bromoform	81	720	16,000	53	100	140	49	360	0.8	(mg/kg)	<0.173	<0.0012	<0.0012	<0.0016	<0.036
Carbon Disulfide	7,800	200,000	20,000	720	720	9	38	230	32	(mg/kg)	<0.52	<0.0036	0.0109	0.0111	<0.108
Carbon tetrachloride	5	44	410	0.3	0.64	0.9	0.021	0.15	0.07	(mg/kg)	<0.173	<0.0012	<0.0012	<0.0016	<0.036
Chlorobenzene	1,600	41,000	4,100	130	210	1.3	54.0	330.0	1	(mg/kg)	<0.173	<0.0012	<0.0012	<0.0016	<0.036
Chloroethane	31,000(1)	820,000(1)	82,000(1)	1500(1)	1,500(1)	94(1)	---	---	15(1)	(mg/kg)	<0.347	<0.0024	<0.0024	<0.0031	<0.0720
Chloroform	100	940	2,000	0.3	0.54	0.76	0.028	0.2	0.6	(mg/kg)	<0.173	<0.0012	<0.0012	<0.0016	<0.036
cis-1,2-Dichloroethylene	780	20,000	20,000	1,200	1,200	1,200	700	700	0.4	(mg/kg)	<0.173	<0.0012	<0.0012	<0.0016	<0.036
cis-1,3-Dichloropropene	6.40	57	1,200	1.1	2.10	0.39	---	---	0.004	(mg/kg)	<0.173	<0.0012	<0.0012	<0.0016	<0.036
Dibromochloromethane	1,600	41,000	41,000	1,300	1,300	1,300	---	---	0.4	(mg/kg)	<0.173	<0.0012	<0.0012	<0.0016	<0.036
Ethene, 1,2-dichloro-, (E)-	1,600	41,000	41,000	3,100	3,100	3,100	---	---	0.7	(mg/kg)	<0.173	<0.0012	<0.0012	<0.0016	<0.036
Methyl bromide	110	2,900	1,000	10	15	3.9	0.71	4.3	0.2	(mg/kg)	<0.347	<0.0024	<0.0024	<0.0031	<0.0720
Methyl chloride (Chloromethane)	310(1)	8,200(1)	820(1)	110(1)	170(1)	1.1(1)	---	---	0.14(1)	(mg/kg)	<0.347	<0.0024	<0.0024	<0.0031	<0.0720
Methyl ethyl ketone	47,000	1,000,000	410,000	140,000	22,000	140	---	---	17	(mg/kg)	<1.73	<0.0012	<0.0118	0.03	0.72
Methyl isobutyl ketone (MIBK)	---	---	---	3,100(1)	3,100(1)	340(1)	---	---	---	(mg/kg)	<1.73	<0.0012	<0.0118	<0.0155	<0.360
Methyl tert-butyl ether	780	20,000	140	8,800	8,800	140	2,900	6,300	0.32	(mg/kg)	<0.0866	<0.0006	<0.0006	<0.0008	<0.018
Methylene chloride	85	760	12,000	13	24	34	1.4	10	0.02	(mg/kg)	<0.173	<0.0012	0.0016	<0.0016	<0.036
Styrene	16,000	410,000	41,000	1,500	1,500	430	230	230	4	(mg/kg)	<0.173	<0.0012	0.0032	<0.0016	<0.036
Tetrachloroethylene	12	110	2,400	11	1,500	430	0.24	1.7	0.06	(mg/kg)	<0.173	<0.0012	<0.0012	<0.0016	<0.036
trans-1,3-Dichloropropene	6.40	57	1,200	1.1	2.1	0.39	0.061	0.45	0.004	(mg/kg)	<0.173	<0.0012	<0.0012	<0.0016	<0.036
Trichloroethylene	58	520	1,200	5	8.9	12	0.26	1.9	0.06	(mg/kg)	<0.173	<0.0012	<0.0012	<0.0016	<0.036
Vinyl chloride	0.3	7.9	170	0.03	1.1	1.1	0.011	0.15	0.01	(mg/kg)	<0.0866	<0.0006	<0.0006	<0.0008	<0.018

Notes:	mg/kg	Milligrams per kilogram
	(1)	Provisional remediation objective provided by IEPA
	-----	No remediation objective has been established by the IEPA for this constitiuent for this exposure route
	<12	Not detected at the level identified
		Analytical result exceeds one or more Tier 1 RO

TABLE 3-7

TIER 1 COMPARISON VOC RESULTS 3 TO 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remediation Objectives - Soil										B-504	B-508	B-509
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to Groundwater		B-504-7	B-508-9	B-509-8
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)	UNITS	7/13/2004 6'-7'	7/19/2004 8'-9'	7/21/2004 7'-8'
1,1,1-Trichloroethane	---	---	---	1,200	1,200	1,200	560	560	2	(mg/kg)	<0.883	<0.104	<0.001
1,1,2,2-Tetrachloroethane	2,300	61,000	61,000	1,000	1,000	1,000	---	---	2	(mg/kg)	<0.883	<0.104	<0.001
1,1,2-Trichloroethane	310	8,200	8,200	1,800	1,800	1,800	900	900	0.02	(mg/kg)	<0.883	<0.104	<0.001
1,1-Dichloroethane	7,800	200,000	200,000	1,300	1,700	130	110	670	23	(mg/kg)	<0.883	<0.104	<0.001
1,1-Dichloroethylene	700	18,000	18,000	15,000	15,000	300	13	77	0.06	(mg/kg)	<0.883	<0.104	<0.001
1,2-Dichloroethane	7	63	1,400	0.4	0.7	0.99	0.066	0.48	0.2	(mg/kg)	<0.883	<0.104	<0.001
1,2-Dichloropropane	9	84	1,800	15	23	0.5	0.023	0.17	0.03	(mg/kg)	<0.883	<0.104	<0.001
2-Hexanone	3100(1)	82000(1)	8200(1)	70(1)	110(1)	0.72(1)	---	---	1.3(1)	(mg/kg)	<8.83	<1.04	<0.0103
Acetone	7,800	200,000	200,000	100,000	100,000	10,000	100,000	100,000	16	(mg/kg)	<8.83	2.5	0.031
Bromodichloromethane	10	92	2,000	3,000	3,000	3,000	1,400	1,400	0.6	(mg/kg)	<0.883	<0.104	<0.001
Bromoform	81	720	16,000	53	100	140	49	360	0.8	(mg/kg)	<0.883	<0.104	<0.001
Carbon Disulfide	7,800	200,000	20,000	720	720	9	38	230	32	(mg/kg)	<2.65	<0.312	<0.0031
Carbon tetrachloride	5	44	410	0.3	0.64	0.9	0.021	0.15	0.07	(mg/kg)	<0.883	<0.104	<0.001
Chlorobenzene	1,600	41,000	4,100	130	210	1.3	54.0	330.0	1	(mg/kg)	<0.883	<0.104	<0.001
Chloroethane	31,000(1)	820,000(1)	82,000(1)	1500(1)	1,500(1)	94(1)	---	---	15(1)	(mg/kg)	<1.77	<0.208	<0.0021
Chloroform	100	940	2,000	0.3	0.54	0.76	0.028	0.2	0.6	(mg/kg)	<0.883	<0.104	<0.001
cis-1,2-Dichloroethylene	780	20,000	20,000	1,200	1,200	1,200	700	700	0.4	(mg/kg)	<0.883	<0.104	<0.001
cis-1,3-Dichloropropene	6.40	57	1,200	1.1	2.10	0.39	---	---	0.004	(mg/kg)	<0.883	<0.104	<0.001
Dibromochloromethane	1,600	41,000	41,000	1,300	1,300	1,300	---	---	0.4	(mg/kg)	<0.883	<0.104	<0.001
Ethene, 1,2-dichloro-, (E)-	1,600	41,000	41,000	3,100	3,100	3,100	---	---	0.7	(mg/kg)	<0.883	<0.104	<0.001
Methyl bromide	110	2,900	1,000	10	15	3.9	0.71	4.3	0.2	(mg/kg)	<1.77	<0.208	<0.0021
Methyl chloride	310(1)	8,200(1)	820(1)	110(1)	170(1)	1.1(1)	---	---	0.14(1)	(mg/kg)	<1.77	<0.208	<0.0021
Methyl ethyl ketone	47,000	1,000,000	410,000	140,000	22,000	140	---	---	17	(mg/kg)	<8.83	<1.04	<0.0103
Methyl isobutyl ketone (MIBK)	---	---	---	3,100(1)	3,100(1)	340(1)	---	---	---	(mg/kg)	<8.83	<1.04	<0.0103
Methyl tert-butyl ether	780	20,000	140	8,800	8,800	140	2,900	6,300	0.32	(mg/kg)	<0.441	<0.052	<0.0005
Methylene chloride	85	760	12,000	13	24	34	1.4	10	0.02	(mg/kg)	<0.883	0.2	<0.001
Styrene	16,000	410,000	41,000	1,500	1,500	430	230	230	4	(mg/kg)	<0.883	<0.104	<0.001
Tetrachloroethylene	12	110	2,400	11	1,500	430	0.24	1.7	0.06	(mg/kg)	<0.883	<0.104	<0.001
trans-1,3-Dichloropropene	6.40	57	1,200	1.1	2.1	0.39	0.061	0.45	0.004	(mg/kg)	<0.883	<0.104	<0.001
Trichloroethylene	58	520	1,200	5	8.9	12	0.26	1.9	0.06	(mg/kg)	<0.883	<0.104	<0.001
Vinyl chloride	0.3	7.9	170	0.03	1.1	1.1	0.011	0.15	0.01	(mg/kg)	<0.441	<0.52	<0.0005

Notes:	mg/kg	Milligrams per kilogram
	(1)	Provisional remediation objective provided by IEPA
	-----	No remediation objective has been established by the IEPA for this constitiuent for this exposure route
	<12	Not detected at the level identified
		Analytical result exceeds one or more Tier 1 RO

TABLE 3-8
TIER 1 COMPARISON VOC RESULTS FOR GREATER THAN 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remediation Objectives - Soil										B-501	B-505	B-506	B-507
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to Groundwater		B-501-24	B-505-11	B-506-28	B-507-19
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)	UNITS	7/13/2004 23'-24'	7/14/2004 10'-11'	7/22/2004 27'-28'	7/21/2004 18'-19'
1,1,1-Trichloroethane	---	---	---	1,200	1,200	1,200	560	560	2	(mg/kg)	<0.0007	<0.211	<0.0009	<1.04
1,1,2,2-Tetrachloroethane	2,300	61,000	61,000	1,000	1,000	1,000	---	---	2	(mg/kg)	<0.0007	<0.211	<0.0009	<1.04
1,1,2-Trichloroethane	310	8,200	8,200	1,800	1,800	1,800	900	900	0.02	(mg/kg)	<0.0007	<0.211	<0.0009	<1.04
1,1-Dichloroethane	7,800	200,000	200,000	1,300	1,700	130	110	670	23	(mg/kg)	<0.0007	<0.211	<0.0009	<1.04
1,1-Dichloroethylene	700	18,000	18,000	15,000	15,000	300	13	77	0.06	(mg/kg)	<0.0007	<0.211	<0.0009	<1.04
1,2-Dichloroethane	7	63	1,400	0.4	0.7	0.99	0.066	0.48	0.2	(mg/kg)	<0.0007	<0.211	<0.0009	<1.04
1,2-Dichloropropane	9	84	1,800	15	23	0.5	0.023	0.17	0.03	(mg/kg)	<0.0007	<0.211	<0.0009	<1.04
2-Hexanone	3100(1)	82000(1)	8200(1)	70(1)	110(1)	0.72(1)	---	---	1.3(1)	(mg/kg)	<0.0074	<2.11	<0.0092	<10.4
Acetone	7,800	200,000	200,000	100,000	100,000	10,000	100,000	100,000	16	(mg/kg)	0.0083	<2.11	0.0575	20
Bromodichloromethane	10	92	2,000	3,000	3,000	3,000	1,400	1,400	0.6	(mg/kg)	<0.0007	<0.211	<0.0009	<1.04
Bromoform	81	720	16,000	53	100	140	49	360	0.8	(mg/kg)	<0.0007	<0.211	<0.0009	<1.04
Carbon Disulfide	7,800	200,000	20,000	720	720	9	38	230	32	(mg/kg)	<0.0022	<0.633	<0.0009	<3.13
Carbon tetrachloride	5	44	410	0.3	0.64	0.9	0.021	0.15	0.07	(mg/kg)	<0.0007	<0.211	<0.0009	<1.04
Chlorobenzene	1,600	41,000	4,100	130	210	1.3	54.0	330.0	1	(mg/kg)	<0.0007	<0.211	<0.0009	<1.04
Chloroethane	31,000(1)	820,000(1)	82,000(1)	1500(1)	1,500(1)	94(1)	---	---	15(1)	(mg/kg)	<0.0015	<0.422	<0.0018	<2.09
Chloroform	100	940	2,000	0.3	0.54	0.76	0.028	0.2	0.6	(mg/kg)	<0.0007	<0.211	<0.0009	<1.04
cis-1,2-Dichloroethylene	780	20,000	20,000	1,200	1,200	1,200	700	700	0.4	(mg/kg)	<0.0007	<0.211	<0.0009	<1.04
cis-1,3-Dichloropropene	6.40	57	1,200	1.1	2.10	0.39	---	---	0.004	(mg/kg)	<0.0007	<0.211	<0.0009	<1.04
Dibromochloromethane	1,600	41,000	41,000	1,300	1,300	1,300	---	---	0.4	(mg/kg)	<0.0007	<0.211	<0.0009	<1.04
Ethene, 1,2-dichloro-, (E)-	1,600	41,000	41,000	3,100	3,100	3,100	---	---	0.7	(mg/kg)	<0.0007	<0.211	<0.0009	<1.04
Methyl bromide	110	2,900	1,000	10	15	3.9	0.71	4.3	0.2	(mg/kg)	<0.0015	<0.422	<0.0018	<2.09
Methyl chloride	310(1)	8,200(1)	820(1)	110(1)	170(1)	1.1(1)	---	---	0.14(1)	(mg/kg)	<0.0015	<0.422	<0.0018	<2.09
Methyl ethyl ketone	47,000	1,000,000	410,000	140,000	22,000	140	---	---	17	(mg/kg)	<0.0074	<2.11	<0.0092	<10.4
Methyl isobutyl ketone (MIBK)	---	---	---	3,100(1)	3,100(1)	340(1)	---	---	---	(mg/kg)	<0.0074	<2.11	<0.0092	<10.4
Methyl tert-butyl ether	780	20,000	140	8,800	8,800	140	2,900	6,300	0.32	(mg/kg)	<0.0004	<0.105	<0.0005	<0.522
Methylene chloride	85	760	12,000	13	24	34	1.4	10	0.02	(mg/kg)	<0.0007	<0.211	0.0016	1.3
Styrene	16,000	410,000	41,000	1,500	1,500	430	230	230	4	(mg/kg)	<0.0007	<0.211	<0.0009	938
Tetrachloroethylene	12	110	2,400	11	1,500	430	0.24	1.7	0.06	(mg/kg)	<0.0007	<0.211	<0.0009	<1.04
trans-1,3-Dichloropropene	6.40	57	1,200	1.1	2.1	0.39	0.061	0.45	0.004	(mg/kg)	<0.0007	<0.211	<0.0009	<1.04
Trichloroethylene	58	520	1,200	5	8.9	12	0.26	1.9	0.06	(mg/kg)	<0.0007	<0.211	<0.0009	<1.04
Vinyl chloride	0.3	7.9	170	0.03	1.1	1.1	0.011	0.15	0.01	(mg/kg)	<0.0004	<0.105	<0.0005	<0.522

Notes:

mg/kg	Milligrams per kilogram
(1)	Provisional remediation objective provided by IEPA
-----	No remediation objective has been established by the IEPA for this constituent for this exposure route
<12	Not detected at the level identified
	Analytical result exceeds one or more Tier 1 RO

TABLE 3-8
TIER 1 COMPARISON VOC RESULTS FOR GREATER THAN 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remediation Objectives - Soil									B-513	B-515	B-553	B-556
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component	B-513-12	B-515-32	B-553-32	B-556-28
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	to Groundwater (Class I)	7/12/2004 11'-12'	7/16/2004 31'-32'	7/14/2004 31'-32'	7/20/2004 27'-28'
1,1,1-Trichloroethane	---	---	---	1,200	1,200	1,200	560	560	2	<0.0008	<0.0007	<0.0007	<0.0008
1,1,2,2-Tetrachloroethane	2,300	61,000	61,000	1,000	1,000	1,000	---	---	2	<0.0008	<0.0007	<0.0007	<0.0008
1,1,2-Trichloroethane	310	8,200	8,200	1,800	1,800	1,800	900	900	0.02	<0.0008	<0.0007	<0.0007	<0.0008
1,1-Dichloroethane	7,800	200,000	200,000	1,300	1,700	130	110	670	23	<0.0008	<0.0007	<0.0007	<0.0008
1,1-Dichloroethylene	700	18,000	18,000	15,000	15,000	300	13	77	0.06	<0.0008	<0.0007	<0.0007	<0.0008
1,2-Dichloroethane	7	63	1,400	0.4	0.7	0.99	0.066	0.48	0.2	<0.0008	<0.0007	<0.0007	<0.0008
1,2-Dichloropropane	9	84	1,800	15	23	0.5	0.023	0.17	0.03	<0.0008	<0.0007	<0.0007	<0.0008
2-Hexanone	3100(1)	82000(1)	8200(1)	70(1)	110(1)	0.72(1)	---	---	1.3(1)	<0.0081	<0.0072	<0.0073	<0.0078
Acetone	7,800	200,000	200,000	100,000	100,000	10,000	100,000	100,000	16	0.019	0.032	0.0371	0.031
Bromodichloromethane	10	92	2,000	3,000	3,000	3,000	1,400	1,400	0.6	<0.0008	<0.0007	<0.0007	<0.0008
Bromoform	81	720	16,000	53	100	140	49	360	0.8	<0.0008	<0.0007	<0.0007	<0.0008
Carbon Disulfide	7,800	200,000	20,000	720	720	9	38	230	32	<0.0024	<0.0022	<0.0022	<0.0023
Carbon tetrachloride	5	44	410	0.3	0.64	0.9	0.021	0.15	0.07	<0.0008	<0.0007	<0.0007	<0.0008
Chlorobenzene	1,600	41,000	4,100	130	210	1.3	54.0	330.0	1	<0.0008	<0.0007	<0.0007	<0.0008
Chloroethane	31,000(1)	820,000(1)	82,000(1)	1500(1)	1,500(1)	94(1)	---	---	15(1)	<0.0016	<0.0014	<0.0014	<0.0016
Chloroform	100	940	2,000	0.3	0.54	0.76	0.028	0.2	0.6	<0.0008	<0.0007	<0.0007	<0.0008
cis-1,2-Dichloroethylene	780	20,000	20,000	1,200	1,200	1,200	700	700	0.4	<0.0008	<0.0007	<0.0007	<0.0008
cis-1,3-Dichloropropene	6.40	57	1,200	1.1	2.10	0.39	---	---	0.004	<0.0008	<0.0007	<0.0007	<0.0008
Dibromochloromethane	1,600	41,000	41,000	1,300	1,300	1,300	---	---	0.4	<0.0008	<0.0007	<0.0007	<0.0008
Ethene, 1,2-dichloro-, (E)-	1,600	41,000	41,000	3,100	3,100	3,100	---	---	0.7	<0.0008	<0.0007	<0.0007	<0.0008
Methyl bromide	110	2,900	1,000	10	15	3.9	0.71	4.3	0.2	<0.0016	<0.0014	<0.0014	<0.0016
Methyl chloride	310(1)	8,200(1)	820(1)	110(1)	170(1)	1.1(1)	---	---	0.14(1)	<0.0016	<0.0014	<0.0014	<0.0016
Methyl ethyl ketone	47,000	1,000,000	410,000	140,000	22,000	140	---	---	17	<0.0081	<0.0072	<0.0073	<0.0078
Methyl isobutyl ketone (MIBK)	---	---	---	3,100(1)	3,100(1)	340(1)	---	---	---	<0.0081	<0.0072	<0.0073	<0.0078
Methyl tert-butyl ether	780	20,000	140	8,800	8,800	140	2,900	6,300	0.32	<0.0004	<0.0004	<0.0004	<0.0004
Methylene chloride	85	760	12,000	13	24	34	1.4	10	0.02	0.0001	<0.0007	0.0008	0.0011
Styrene	16,000	410,000	41,000	1,500	1,500	430	230	230	4	<0.0008	<0.0007	<0.0007	<0.0008
Tetrachloroethylene	12	110	2,400	11	1,500	430	0.24	1.7	0.06	<0.0008	<0.0007	<0.0007	<0.0008
trans-1,3-Dichloropropene	6.40	57	1,200	1.1	2.1	0.39	0.061	0.45	0.004	<0.0008	<0.0007	<0.0007	<0.0008
Trichloroethylene	58	520	1,200	5	8.9	12	0.26	1.9	0.06	<0.0008	<0.0007	<0.0007	<0.0008
Vinyl chloride	0.3	7.9	170	0.03	1.1	1.1	0.011	0.15	0.01	<0.0004	<0.0004	<0.0004	<0.0004

Notes:

mg/kg	Milligrams per kilogram
(1)	Provisional remediation objective provided by IEPA
-----	No remediation objective has been established by the IEPA for this constitiuent for this exposure route
<12	Not detected at the level identified
	Analytical result exceeds one or more Tier 1 RO

TABLE 3-8
TIER 1 COMPARISON VOC RESULTS FOR GREATER THAN 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remediation Objectives - Soil									
		Ingestion			***Inhalation***		***Indoor Inhalation***		**Soil Component to Groundwater (Class I)**	**B-557 B-557-12 7/20/2004 11'-12'**
CONSTITUENT	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**		
1,1,1-Trichloroethane	---	---	---	1,200	1,200	1,200	560	560	2	<0.0018
1,1,2,2-Tetrachloroethane	2,300	61,000	61,000	1,000	1,000	1,000	---	---	2	<0.0018
1,1,2-Trichloroethane	310	8,200	8,200	1,800	1,800	1,800	900	900	0.02	<0.0018
1,1-Dichloroethane	7,800	200,000	200,000	1,300	1,700	130	110	670	23	<0.0018
1,1-Dichloroethylene	700	18,000	18,000	15,000	15,000	300	13	77	0.06	<0.0018
1,2-Dichloroethane	7	63	1,400	0.4	0.7	0.99	0.066	0.48	0.2	<0.0018
1,2-Dichloropropane	9	84	1,800	15	23	0.5	0.023	0.17	0.03	<0.0018
2-Hexanone	3100(1)	82000(1)	8200(1)	70(1)	110(1)	0.72(1)	---	---	1.3(1)	<0.018
Acetone	7,800	200,000	200,000	100,000	100,000	10,000	100,000	100,000	16	0.067
Bromodichloromethane	10	92	2,000	3,000	3,000	3,000	1,400	1,400	0.6	<0.0018
Bromoform	81	720	16,000	53	100	140	49	360	0.8	<0.0018
Carbon Disulfide	7,800	200,000	20,000	720	720	9	38	230	32	<0.0054
Carbon tetrachloride	5	44	410	0.3	0.64	0.9	0.021	0.15	0.07	<0.0018
Chlorobenzene	1,600	41,000	4,100	130	210	1.3	54.0	330.0	1	<0.0018
Chloroethane	31,000(1)	820,000(1)	82,000(1)	1500(1)	1,500(1)	94(1)	---	---	15(1)	<0.0036
Chloroform	100	940	2,000	0.3	0.54	0.76	0.028	0.2	0.6	<0.0018
cis-1,2-Dichloroethylene	780	20,000	20,000	1,200	1,200	1,200	700	700	0.4	<0.0018
cis-1,3-Dichloropropene	6.40	57	1,200	1.1	2.10	0.39	---	---	0.004	<0.0018
Dibromochloromethane	1,600	41,000	41,000	1,300	1,300	1,300	---	---	0.4	<0.0018
Ethene, 1,2-dichloro-, (E)-	1,600	41,000	41,000	3,100	3,100	3,100	---	---	0.7	<0.0018
Methyl bromide	110	2,900	1,000	10	15	3.9	0.71	4.3	0.2	<0.0036
Methyl chloride	310(1)	8,200(1)	820(1)	110(1)	170(1)	1.1(1)	---	---	0.14(1)	<0.0036
Methyl ethyl ketone	47,000	1,000,000	410,000	140,000	22,000	140	---	---	17	<0.018
Methyl isobutyl ketone (MIBK)	---	---	---	3,100(1)	3,100(1)	340(1)	---	---	---	<0.018
Methyl tert-butyl ether	780	20,000	140	8,800	8,800	140	2,900	6,300	0.32	<0.0009
Methylene chloride	85	760	12,000	13	24	34	1.4	10	0.02	<0.0018
Styrene	16,000	410,000	41,000	1,500	1,500	430	230	230	4	<0.0018
Tetrachloroethylene	12	110	2,400	11	1,500	430	0.24	1.7	0.06	<0.0018
trans-1,3-Dichloropropene	6.40	57	1,200	1.1	2.1	0.39	0.061	0.45	0.004	<0.0018
Trichloroethylene	58	520	1,200	5	8.9	12	0.26	1.9	0.06	<0.0018
Vinyl chloride	0.3	7.9	170	0.03	1.1	1.1	0.011	0.15	0.01	<0.0009

Notes:	mg/kg	Milligrams per kilogram
	(1)	Provisional remediation objective provided by IEPA
	-----	No remediation objective has been established by the IEPA for this constituent for this exposure route
	<12	Not detected at the level identified
		Analytical result exceeds one or more Tier 1 RO

TABLE 3-9
GROUNDWATER ANALYTICAL RESULTS - VOCs
SEPTEMBER, 2008
CHAMPAIGN MGP SITE
AMERENIP

CONSTITUENT	Class I Groundwater Standard	Units	UMW-102 9/16/2008	UMW-104 9/17/2008	UMW-105 9/16/2008	UMW-106 9/16/2008	UMW-107 9/16/2008	UMW-108 9/17/2008	UMW-109 9/17/2008	UMW-110 9/17/2008	UMW-111A 9/17/2008	UMW-113 9/16/2008	UMW-113 D 9/16/2008	UMW-114 9/16/2008	UMW-115 9/16/2008	UMW-116 9/16/2008	UMW-117 9/17/2008	UMW-118 9/17/2008	UMW-119 9/16/2008	UMW-120 9/16/2008
Volatile Organic Compounds (8260B)																				
1,1,1-Trichloroethane	200	ug/L	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<500	<5	<5	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	420 (1)	ug/L	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<500	<5	<5	<5	<5	<5	<5
1,1,2-Trichloroethane	5	ug/L	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<500	<5	<5	<5	<5	<5	<5
1,1-Dichloroethane	700	ug/L	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<500	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene	7	ug/L	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<500	<5	<5	<5	<5	<5	<5
1,2-Dichloroethane	5	ug/L	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<500	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane	5	ug/L	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<500	<5	<5	<5	<5	<5	<5
2-Butanone	4,200 (1)	ug/L	<25	<25	<25	<25	<125	<25	<25	<25	<25	<25	<25	<2500	<25	<25	<25	<25	<25	<25
2-Hexanone	280 (1)	ug/L	<25	<25	<25	<25	<125	<25	<25	<25	<25	<25	<25	<2500	<25	<25	<25	<25	<25	<25
4-Methyl-2-pentanone	---	ug/L	<25	<25	<25	<25	<125	<25	<25	<25	<25	<25	<25	<2500	<25	<25	<25	<25	<25	<25
Acetone	6300	ug/L	<25	<25	<25	<25	<125	<25	<25	<25	<25	<25	<25	<2500	<25	<25	<25	<25	<25	<25
Benzene	5	ug/L	<2	<2	<2	<2	640	<2	<2	17.6	<2	2.3	2.6	1320	15.1	<2	<2	<2	1.3	<2
Bromodichloromethane	0.2	ug/L	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<500	<5	<5	<5	<5	<5	<5
Bromoform	1	ug/L	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<500	<5	<5	<5	<5	<5	<5
Bromomethane	9.8	ug/L	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10	<1000	<10	<10	<10	<10	<10	<10
Carbon disulfide	700	ug/L	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<500	<5	<5	<5	<5	<5	<5
Carbon tetrachloride	5	ug/L	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<500	<5	<5	<5	<5	<5	<5
Chlorobenzene	100	ug/L	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<500	<5	<5	<5	<5	<5	<5
Chloroethane	2800 (1)	ug/L	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10	<1000	<10	<10	<10	<10	<10	<10
Chloroform	0.2	ug/L	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<500	<5	<5	<5	<5	<5	<5
Chloromethane	28 (1)	ug/L	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10	<1000	<10	<10	<10	<10	<10	<10
cis-1,2-Dichloroethene	70	ug/L	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<500	<5	<5	<5	<5	<5	<5
cis-1,3-Dichloropropene	1	ug/L	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<500	<5	<5	<5	<5	<5	<5
Dibromochloromethane	140	ug/L	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<500	<5	<5	<5	<5	<5	<5
Ethylbenzene	700	ug/L	<5	<5	<5	<5	26.8	<5	<5	25.1	<5	<5	<5	1160	2.3	<5	<5	<5	<5	<5
Methyl tert-butyl ether	70	ug/L	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<200	<2	<2	<2	<2	<2	<2
Methylene chloride	5	ug/L	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<500	<5	<5	<5	<5	<5	<5
Styrene	100	ug/L	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<500	<5	<5	<5	<5	<5	<5
Tetrachloroethene	5	ug/L	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<500	<5	<5	<5	<5	<5	<5
Toluene	1000	ug/L	<5	<5	<5	<5	<25	<5	<5	2.2	<5	<5	<5	130	<5	<5	<5	<5	<5	<5
trans-1,2-Dichloroethene	100	ug/L	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<500	<5	<5	<5	<5	<5	<5
trans-1,3-Dichloropropene	1	ug/L	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<500	<5	<5	<5	<5	<5	<5
Trichloroethene	5	ug/L	<5	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<500	<5	<5	<5	<5	<5	<5
Vinyl chloride	2	ug/L	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<200	<2	<2	<2	<2	<2	<2
Xylenes, Total	10000	ug/L	<5	<5	<5	<5	35.8	<5	<5	57.4	<5	2.1	2.4	932	1.1	<5	<5	<5	<5	<5

Notes:

ug/L Micrograms per liter
(1) Non-TACO or provisional RO provided by the IEPA
<5 Not detected at the method limit identified
Constituent exceeds Class I Groundwater Standard

TABLE 3-9
GROUNDWATER ANALYTICAL RESULTS - VOCs
SEPTEMBER, 2008
CHAMPAIGN MGP SITE
AMERENIP

CONSTITUENT	Class I Groundwater Standard	Units	UMW-121 9/16/2008	UMW-300 9/18/2008	UMW-301 9/17/2008	UMW-302 9/16/2008	UMW-303 9/17/2008	UMW-303 D 9/17/2008	UMW-304 9/16/2008	UMW-305 9/16/2008	UMW-306 9/16/2008	UMW-307 9/16/2008
Volatile Organic Compounds (8260B)												
1,1,1-Trichloroethane	200	ug/L	<5	<5	<5	<125	<5	<5	<25	<5	<5	<5
1,1,2,2-Tetrachloroethane	420 (1)	ug/L	<5	<5	<5	<125	<5	<5	<25	<5	<5	<5
1,1,2-Trichloroethane	5	ug/L	<5	<5	<5	<125	<5	<5	<25	<5	<5	<5
1,1-Dichloroethane	700	ug/L	<5	<5	<5	<125	<5	<5	<25	<5	<5	<5
1,1-Dichloroethene	7	ug/L	<5	<5	<5	<125	<5	<5	<25	<5	<5	<5
1,2-Dichloroethane	5	ug/L	<5	<5	<5	<125	<5	<5	<25	<5	<5	<5
1,2-Dichloropropane	5	ug/L	<5	<5	<5	<125	<5	<5	<25	<5	<5	<5
2-Butanone	4,200 (1)	ug/L	<25	<25	<25	<625	<25	<25	<125	<25	<25	<25
2-Hexanone	280 (1)	ug/L	<25	<25	<25	<625	<25	<25	<125	<25	<25	<25
4-Methyl-2-pentanone	---	ug/L	<25	<25	<25	<625	<25	<25	<125	<25	<25	<25
Acetone	6300	ug/L	<25	<25	<25	<625	<25	<25	<125	6	<25	<25
Benzene	5	ug/L	<2	<2	<2	1030	<2	<2	29.2	<2	<2	<2
Bromodichloromethane	0.2	ug/L	<5	<5	<5	<125	<5	<5	<25	<5	<5	<5
Bromoform	1	ug/L	<5	<5	<5	<125	<5	<5	<25	<5	<5	<5
Bromomethane	9.8	ug/L	<10	<10	<10	<250	<10	<10	<50	<10	<10	<10
Carbon disulfide	700	ug/L	<5	<5	<5	<125	<5	<5	<25	<5	<5	<5
Carbon tetrachloride	5	ug/L	<5	<5	<5	<125	<5	<5	<25	<5	<5	<5
Chlorobenzene	100	ug/L	<5	<5	<5	<125	<5	<5	<25	<5	<5	<5
Chloroethane	2800 (1)	ug/L	<10	<10	<10	<250	<10	<10	<50	<10	<10	<10
Chloroform	0.2	ug/L	<5	<5	<5	<125	<5	<5	<25	<5	<5	<5
Chloromethane	28 (1)	ug/L	<10	<10	<10	<250	<10	<10	<50	<10	<10	<10
cis-1,2-Dichloroethene	70	ug/L	<5	<5	<5	<125	<5	<5	<25	<5	<5	<5
cis-1,3-Dichloropropene	1	ug/L	<5	<5	<5	<125	<5	<5	<25	<5	<5	<5
Dibromochloromethane	140	ug/L	<5	<5	<5	<125	<5	<5	<25	<5	<5	<5
Ethylbenzene	700	ug/L	<5	<5	<5	86	<5	<5	390	<5	<5	<5
Methyl tert-butyl ether	70	ug/L	<2	<2	<2	<50	<2	<2	<10	<2	<2	<2
Methylene chloride	5	ug/L	<5	<5	<5	<125	<5	<5	<25	<5	<5	<5
Styrene	100	ug/L	<5	<5	<5	<125	<5	<5	<25	<5	<5	<5
Tetrachloroethene	5	ug/L	<5	<5	<5	<125	<5	<5	<25	<5	<5	<5
Toluene	1000	ug/L	<5	<5	<5	<125	<5	<5	6.4	<5	<5	<5
trans-1,2-Dichloroethene	100	ug/L	<5	<5	<5	<125	<5	<5	<25	<5	<5	<5
trans-1,3-Dichloropropene	1	ug/L	<5	<5	<5	<125	<5	<5	<25	<5	<5	<5
Trichloroethene	5	ug/L	<5	<5	<5	<125	<5	<5	<25	<5	<5	<5
Vinyl chloride	2	ug/L	<2	<2	<2	<50	<2	<2	<10	<2	<2	<2
Xylenes, Total	10000	ug/L	<5	<5	3.8	110	<5	<5	108	<5	<5	<5

Notes:

ug/L Micrograms per liter
(1) Non-TACO or provisional RO provided by the IEPA
<5 Not detected at the method limit identified
Constituent exceeds Class I Groundwater Standard

TABLE 3-10
SURFACE SOIL SVOC RESULTS
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remediation Objectives Soil								Soil Component to GW		B-503 B-503-3 7/13/2004	B-510 B-510-2 7/12/2004	B-514 B-514-3 7/22/2004	B-550 B-550-3 7/20/2004	B-554 B-554-3 7/15/2004
		Ingestion			Inhalation		Indoor Inhalation								
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)	UNITS/DEPTH	2'-3'	1'-2'	2'-3'	2'-3'	2'-3'
1,2,4-Trichlorobenzene	780	20,000	35	3,200	3,200	920	220	980	5	(mg/kg)	<50.3	<2.62	<2.12	<13.1	<3.43
2,4,5-Trichlorophenol	7,800	200,000	200,000	---	---	---	---	---	270	(mg/kg)	<35.9	<1.87	<1.52	<9.37	<2.45
2,4,6-Trichlorophenol	58	520	11,000	200	390	540	---	---	0.2	(mg/kg)	<47.7	<2.48	<2.01	<12.4	<3.25
2,4-Dichlorophenol	230	6,100	610	---	---	---	---	---	1	(mg/kg)	<45.8	<2.38	<1.93	<11.9	<3.12
2,4-Dimethylphenol	1,600	41,000	41,000	---	---	---	---	---	9	(mg/kg)	<48.0	<2.50	<2.03	<12.5	<3.27
2,4-Dinitrophenol	160	4,100	410	---	---	---	---	---	0.2	(mg/kg)	<40.5	<2.11	<1.71	<10.6	<2.76
2,4-Dinitrotoluene	0.9	8.4	180	---	---	---	---	---	0.0008	(mg/kg)	<39.3	<2.05	<1.66	<10.3	<2.68
2,6-Dinitrotoluene	0.9	8.4	180	---	---	---	---	---	0.0007	(mg/kg)	<40.9	<2.13	<1.72	<10.7	<2.78
2-Chloronaphthalene	6,300	160,000	160,000	---	---	---	---	---	240	(mg/kg)	<45.4	<2.36	<1.91	<11.8	<3.09
2-Chlorophenol	390	10,000	10,000	53,000	53,000	53,000	---	---	4	(mg/kg)	<48.0	<2.50	<2.03	<12.5	<3.27
2-Methylnaphthalene	2,300	61,000	61,000	---	---	---	83	83	29	(mg/kg)	<45.0	<2.30	<1.90	<12.0	<3.10
3,3-Dichlorobenzidine	1.0	13	280	---	---	---	---	---	0.007	(mg/kg)	<32.5	<1.69	<1.37	<8.48	<2.22
4,6-Dinitro-o-cresol	27(1)	720(1)	71(1)	---	---	---	---	---	0.04(1)	(mg/kg)	<40.9	<2.13	<1.72	<10.7	<2.78
4-Bromophenyl phenyl ether	---	---	---	---	---	---	---	---	---	(mg/kg)	<34.8	<1.81	<1.47	<9.07	<2.37
4-Chlorophenyl phenyl ether	---	---	---	---	---	---	---	---	---	(mg/kg)	<37.4	<1.95	<1.58	<9.76	<2.55
Bis(2-chloroethoxy)methane	---	---	---	---	---	---	---	---	---	(mg/kg)	<44.3	<2.30	<1.87	<11.5	<3.02
Bis(2-chloroethyl)ether	0.6	5.0	75.0	0.2	0.5	0.7	0.5	3.7	0.0004	(mg/kg)	<53.7	<2.80	<2.27	<14.0	<3.66
Bis(2-chloroisopropyl)ether	3100(1)	82000(1)	8200(1)	1300(1)	1300(1)	1300(1)	---	---	2.4	(mg/kg)	<43.1	<2.24	<1.82	<11.2	<2.94
Bis(2-ethylhexyl)phthalate (BEHP)	46	410	4,100	31,000	31,000	31,000	---	---	3,600	(mg/kg)	<44.0	<2.30	<1.90	<12.0	<3.00
Butyl benzyl phthalate	16,000	410,000	410,000	930	930	930	---	---	930	(mg/kg)	<38.2	<1.99	<1.61	<9.96	<2.60
Carbazole	32	290	6,200	---	---	---	---	---	0.60	(mg/kg)	<46.0	<2.40	<2.00	<12.0	<3.10
Dibenzofuran	310	8,200	820	---	---	---	---	---	15	(mg/kg)	<48.0	<2.50	<2.00	<12.0	<3.20
Diethyl phthalate	63,000	1,000,000	1,000,000	2,000	2,000	2,000	---	---	470	(mg/kg)	<36.3	<1.89	<1.53	<9.47	<2.47
Dimethyl phthalate	780,000(1)	1,000,000(1)	1,000,000(1)	1,300(1)	1,300(1)	1,300(1)	---	---	380(1)	(mg/kg)	<34.4	<1.79	<1.45	<8.98	<2.35
Di-n-butyl phthalate	7,800	200,000	200,000	2,300	2,300	2,300	---	---	0.0004	(mg/kg)	<39.0	<2.03	<1.64	<10.2	<2.66
Di-n-octyl phthalate	1,600	41,000	4,100	10,000	10,000	10,000	---	---	10,000	(mg/kg)	<39.3	<2.05	<1.66	<10.3	<2.68
Hexachlorobenzene	0.4	4.0	78.0	1	1.8	2.6	0.25	0.25	2	(mg/kg)	<37.1	<1.93	<1.56	<9.67	<2.53
Hexachlorobutadiene	16	410	41	1,000	1,000	180	---	---	2.9	(mg/kg)	<58.6	<3.05	<2.47	<15.3	<4.00
Hexachlorocyclopentadiene	550	14,000	14,000	10	16	1.1	5.0	30.0	400	(mg/kg)	<38.6	<2.01	<1.63	<10.1	<2.63
Hexachloroethane	78	2,000	2,000	---	---	---	160	160	0.5	(mg/kg)	<63.2	<3.29	<2.67	<16.5	<4.31
Isophorone	15,600	410,000	410,000	4,600	4,600	4,600	1,800	1,800	8	(mg/kg)	<44.6	<2.32	<1.88	<11.6	<3.04
m & p-Cresol(s)	390(1)	10,000(1)	1,000(1)	---	---	---	---	---	0.24(1)	(mg/kg)	<47.7	<2.48	<2.01	<12.4	<3.25
m-Dichlorobenzene	70 (1)	1,800 (1)	180 (1)	570 (1)	570 (1)	570 (1)	---	---	0.2 (1)	(mg/kg)	<63.5	<3.31	<2.68	<16.6	<4.33
m-Nitroaniline	---	---	---	---	---	---	---	---	---	(mg/kg)	<31.0	<1.61	<1.31	<8.09	<2.11
Nitrobenzene	39	1,000	1,000	92	140	9.4	140.0	380.0	0.1	(mg/kg)	<47.3	<2.46	<1.99	<12.3	<3.22
N-Nitrosodiphenylamine	130	1,200	25,000	---	---	---	---	---	1	(mg/kg)	<34.8	<1.81	<1.47	<9.07	<2.37
N-Nitrosodipropylamine	0.09	0.8	18	---	---	---	0.43	3.1	0.00005	(mg/kg)	<41.6	<2.17	<1.76	<10.8	<2.84
o-Cresol	3,900	100,000	100,000	---	---	---	---	---	15	(mg/kg)	<44.6	<2.32	<1.88	<11.6	<3.04
o-Dichlorobenzene	7,000	180,000	560	560	18,000	310	---	---	17	(mg/kg)	<60.1	<3.13	<2.54	<15.7	<4.10
o-Nitroaniline	---	---	---	73(1)	120(1)	7.5(1)	---	---	---	(mg/kg)	<34.4	<1.79	<1.45	<8.98	<2.35
o-Nitrophenol	---	---	---	---	---	---	---	---	---	(mg/kg)	<42.4	<2.21	<1.79	<11.0	<2.89
p-Chloroaniline	310	8,200	---	---	820	---	---	---	0.7	(mg/kg)	<45.8	<2.38	<1.93	<11.9	<3.12
p-Chloro-m-cresol	---	---	---	---	---	---	---	---	---	(mg/kg)	<41.6	<2.17	<1.76	<10.8	<2.84
PCP	3	24	52	---	---	---	---	---	0.03	(mg/kg)	<250	<13.0	<10.5	<65.1	<17.0
p-Dichlorobenzene	---	---	---	11,000	17,000	340	---	---	2	(mg/kg)	<60.1	<3.13	<2.54	<15.7	<4.10
Phenol	47,000	1,000,000	120,000	---	---	---	---	---	100	(mg/kg)	<43.9	<2.28	<1.85	<11.4	<2.99
p-Nitroaniline	---	---	---	---	---	---	---	---	---	(mg/kg)	<34.4	<1.79	<1.45	<8.98	<2.35
p-Nitrophenol	---	---	---	---	---	---	---	---	---	(mg/kg)	<37.1	<1.93	<1.56	<9.67	<2.53

Notes:
- mg/kg — Milligrams per kilogram
- (1) — Provisional remediation objective provided by IEPA
- ----- — No remediation objective has been established by the IEPA for this constituent for this exposure route
- <12 — Not detected at the level identified
- Analytical result exceeds one or more Tier 1 RO

TABLE 3-11
TIER 1 COMPARISON SVOC RESULTS FOR 3 TO 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remediation Objectives - Soil										B-503	B-504	B-508	B-509	B-514	B-550	B-554
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to Groundwater		B503-3 (2-3)	B-504-7	B-508-9	B-509-8	B514-3 (2-3')	B550-3 (2-3')	B554-3 (2-3)
											7/13/2004	7/13/2004	7/19/2004	7/21/2004	7/22/2004	7/20/2004	7/15/2004
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)	UNITS/DEPTH	3	6'-7'	8'-9'	7'-8'	3	3	3
1,2,4-Trichlorobenzene	780	20,000	35	3,200	3,200	920	220	980	5	(mg/kg)	<50.3	<60.7	<4.22	<0.856	<2.12	<13.1	<3.43
2,4,5-Trichlorophenol	7,800	200,000	200,000	---	---	---	---	---	270	(mg/kg)	<35.9	<43.3	<3.02	<0.611	<1.52	<9.37	<2.45
2,4,6-Trichlorophenol	58	520	11,000	200	390	540	---	---	0.2	(mg/kg)	<47.7	<57.5	<4.00	<0.811	<2.01	<12.4	<3.25
2,4-Dichlorophenol	230	6,100	610	---	---	---	---	---	1	(mg/kg)	<45.8	<55.2	<3.84	<0.778	<1.93	<11.9	<3.12
2,4-Dimethylphenol	1,600	41,000	41,000	---	---	---	---	---	9	(mg/kg)	<48000	<58.0	<4.00	<0.820	<2000	<12000	<3300
2,4-Dinitrophenol	160	4,100	410	---	---	---	---	---	0.2	(mg/kg)	<40.5	<48.8	<3.40	<0.688	<1.71	<10.6	<2.76
2,4-Dinitrotoluene	0.9	8.4	180	---	---	---	---	---	0.0008	(mg/kg)	<39.3	<47.4	<3.30	<0.669	<1.66	<10.3	<2.68
2,6-Dinitrotoluene	0.9	8.4	180	---	---	---	---	---	0.0007	(mg/kg)	<40.9	<49.3	<3.43	<0.695	<1.72	<10.7	<2.78
2-Chloronaphthalene	6,300	160,000	160,000	---	---	---	---	---	240	(mg/kg)	<45.4	<54.7	<3.81	<0.772	<1.91	<11.8	<3.09
2-Chlorophenol	390	10,000	10,000	53,000	53,000	53,000	---	---	4	(mg/kg)	<48.0	<57.9	<4.03	<0.817	<2.03	<12.5	<3.27
2-Methylnaphthalene	2,300	61,000	61,000	---	---	---	83	83	29	(mg/kg)	<45000	1200	76	<0.770	<1900	<12000	<3100
3,3-Dichlorobenzidine	1.0	13	280	---	---	---	---	---	0.007	(mg/kg)	<32.5	<39.2	<2.73	<0.553	<1.37	<8.48	<2.22
4,6-Dinitro-o-cresol	27(1)	720(1)	71(1)	---	---	---	---	---	0.04(1)	(mg/kg)	<40.9	<49.3	<3.43	<0.695	<1.72	<10.7	<2.78
4-Bromophenyl phenyl ether	---	---	---	---	---	---	---	---	---	(mg/kg)	<34.8	<42.0	<2.92	<0.592	<1.47	<9.07	<2.37
4-Chlorophenyl phenyl ether	---	---	---	---	---	---	---	---	---	(mg/kg)	<37.4	<45.2	<3.14	<0.637	<1.58	<9.76	<2.55
Bis(2-chloroethoxy)methane	---	---	---	---	---	---	---	---	---	(mg/kg)	<44.3	<53.4	<3.72	<0.753	<1.87	<11.5	<3.02
Bis(2-chloroethyl)ether	0.6	5.0	75.0	0.2	0.5	0.7	0.5	3.7	0.0004	(mg/kg)	<53.7	<64.8	<4.51	<0.914	<2.27	<14.0	<3.66
Bis(2-chloroisopropyl)ether	3100(1)	82000(1)	8200(1)	1300(1)	1300(1)	1300(1)	---	---	2.4	(mg/kg)	<43.1	<52.0	<3.62	<0.733	<1.82	<11.2	<2.94
Bis(2-ethylhexyl)phthalate (BEHP)	46	410	4,100	31,000	31,000	31,000	---	---	3,600	(mg/kg)	<44.3	<53.4	<3.72	<0.753	<1.87	<11.5	<3.02
Butyl benzyl phthalate	16,000	410,000	410,000	930	930	930	---	---	930	(mg/kg)	<38.2	<46.1	<3.21	<0.650	<1.61	<9.96	<2.60
Carbazole	32	290	6,200	---	---	---	---	---	0.60	(mg/kg)	<46000	<56.0	<3.90	<0.780	<2000	<12000	<3100
Dibenzofuran	310	8,200	820	---	---	---	---	---	15	(mg/kg)	<48000	69	4.1	1.6	<2000	<12000	<3200
Diethyl phthalate	63,000	1,000,000	1,000,000	2,000	2,000	2,000	---	---	470	(mg/kg)	<36.3	<43.8	<3.05	<0.618	<1.53	<9.47	<2.47
Dimethyl phthalate	780,000(1)	1,000,000(1)	1,000,000(1)	1,300(1)	1,300(1)	1,300(1)	---	---	380(1)	(mg/kg)	<34.4	<41.5	<2.89	<0.585	<1.45	<8.98	<2.35
Di-n-butyl phthalate	7,800	200,000	200,000	2,300	2,300	2,300	---	---	0.0004	(mg/kg)	<39.0	<47.0	<3.27	<0.663	<1.64	<10.2	<2.66
Di-n-octyl phthalate	1,600	41,000	4,100	10,000	10,000	10,000	---	---	10,000	(mg/kg)	<39.3	<47.4	<3.30	<0.669	<1.66	<10.3	<2.68
Hexachlorobenzene	0.4	4.0	78.0	1	1.8	2.6	0.25	0.25	2	(mg/kg)	<37.1	<44.7	<3.11	<0.630	<1.56	<9.67	<2.53
Hexachlorobutadiene	16	410	41	1,000	1,000	180	---	---	2.9	(mg/kg)	<58.6	<70.7	<4.92	<0.997	<2.47	<15.3	<4.00
Hexachlorocyclopentadiene	550	14,000	14,000	10	16	1.1	5.0	30.0	400	(mg/kg)	<38.6	<46.5	<3.24	<0.656	<1.63	<10.1	<2.63
Hexachloroethane	78	2,000	2,000	---	---	---	160	160	0.5	(mg/kg)	<63.2	<76.2	<5.30	<1.07	<2.67	<16.5	<4.31
Isophorone	15,600	410,000	410,000	4,600	4,600	4,600	1,800	1,800	8	(mg/kg)	<44.6	<53.8	<3.75	<0.759	<1.88	<11.6	<3.04
m & p-Cresol(s)	390(1)	10,000(1)	1,000(1)	---	---	---	---	---	0.24(1)	(mg/kg)	<47.7	<57.5	<4.00	<0.811	<2.01	<12.4	<3.25
m-Dichlorobenzene	70 (1)	1,800 (1)	180 (1)	570 (1)	570 (1)	570 (1)	---	---	0.2 (1)	(mg/kg)	<63.5	<76.6	<5.33	<1.08	<2.68	<16.6	<4.33
m-Nitroaniline	---	---	---	---	---	---	---	---	---	(mg/kg)	<31.0	<37.4	<2.60	<0.528	<1.31	<8.09	<2.11
Nitrobenzene	39	1,000	1,000	92	140	9.4	140.0	380.0	0.1	(mg/kg)	<47.3	<57.0	<3.97	<0.804	<1.99	<12.3	<3.22
N-Nitrosodiphenylamine	130	1,200	25,000	---	---	---	---	---	1	(mg/kg)	<34.8	<42.0	<2.92	<0.592	<1.47	<9.07	<2.37
N-Nitrosodipropylamine	0.09	0.8	18	---	---	---	0.43	3.1	0.00005	(mg/kg)	<41.6	<50.2	<3.49	<0.708	<1.76	<10.8	<2.84
o-Cresol	3,900	100,000	100,000	---	---	---	---	---	15	(mg/kg)	<45000	<54.0	<3.80	<0.760	<1900	<12000	<3000
o-Dichlorobenzene	7,000	180,000	560	560	18,000	310	---	---	17	(mg/kg)	<60.1	<72.5	<5.05	<1.02	<2.54	<15.7	<4.10
o-Nitroaniline	---	---	---	73(1)	120(1)	7.5(1)	---	---	---	(mg/kg)	<34.4	<41.5	<2.89	<0.585	<1.45	<8.98	<2.35
o-Nitrophenol	---	---	---	---	---	---	---	---	---	(mg/kg)	<42.4	<51.1	<3.56	<0.721	<1.79	<11.0	<2.89
p-Chloroaniline	310	8,200	---	---	820	---	---	---	0.7	(mg/kg)	<45.8	<55.2	<3.84	<0.778	<1.93	<11.9	<3.12
p-Chloro-m-cresol	---	---	---	---	---	---	---	---	---	(mg/kg)	<41.6	<50.2	<3.49	<0.708	<1.76	<10.8	<2.84
PCP	3	24	52	---	---	---	---	---	0.03	(mg/kg)	<250	<301	<21.0	<4.25	<10.5	<65.1	<17.0
p-Dichlorobenzene	---	---	---	11,000	17,000	340	---	---	2	(mg/kg)	<60.1	<72.5	<5.05	<1.02	<2.54	<15.7	<4.10
Phenol	47,000	1,000,000	120,000	---	---	---	---	---	100	(mg/kg)	<44000	<53.0	<3.70	<0.750	<1800	<11000	<3000
p-Nitroaniline	---	---	---	---	---	---	---	---	---	(mg/kg)	<34.4	<41.5	<2.89	<0.585	<1.45	<8.98	<2.35
p-Nitrophenol	---	---	---	---	---	---	---	---	---	(mg/kg)	<37.1	<44.7	<3.11	<0.630	<1.56	<9.67	<2.53

Notes:
- mg/kg — Milligrams per kilogram
- (1) — Provisional remediation objective provided by IEPA
- ----- — No remediation objective has been established by the IEPA for this constitiuent for this exposure route
- <12 — Not detected at the level identified
- Analytical result exceeds one or more Tier 1 RO

TABLE 3-12
TIER 1 COMPARISON SVOC RESULTS FOR GREATER THAN 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remediation Objectives - Soil										B-501	B-505	B-506	B-507	B-513	B-515
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to Groundwater		B-501-24 (23-24) 7/13/2004	B-505-11 (10-11) 7/14/2004	B-506-28 (27-28) 7/22/2004	B-507-19 (18-19) 7/21/2004	B-513-12 (11-12) 7/12/2004	B-515-32 (31-32) 7/16/2004
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)	UNITS/DEPTH	23'-24'	10'-11'	27'-28'	18'-19'	11'-12'	31'-32'
1,2,4-Trichlorobenzene	780	20,000	35	3,200	3,200	920	220	980	5	(mg/kg)	<0.148	<4.29	<0.147	<20.6	<0.148	<0.142
2,4,5-Trichlorophenol	7,800	200,000	200,000	---	---	---	---	---	270	(mg/kg)	<0.105	<3.07	<0.105	<14.7	<0.106	<0.101
2,4,6-Trichlorophenol	58	520	11,000	200	390	540	---	---	0.2	(mg/kg)	<0.140	<4.07	<0.139	<19.5	<0.140	<0.134
2,4-Dichlorophenol	230	6,100	610	---	---	---	---	---	1	(mg/kg)	<0.134	<3.91	<0.134	<18.8	<0.135	<0.129
2,4-Dimethylphenol	1,600	41,000	41,000	---	---	---	---	---	9	(mg/kg)	<0.140	<4.10	<0.140	<20.0	<0.140	<0.140
2,4-Dinitrophenol	160	4,100	410	---	---	---	---	---	0.2	(mg/kg)	<0.119	<3.45	<0.118	<16.6	<0.119	<0.114
2,4-Dinitrotoluene	0.9	8.4	180	---	---	---	---	---	0.0008	(mg/kg)	<0.115	<3.36	<0.115	<16.1	<0.116	<0.111
2,6-Dinitrotoluene	0.9	8.4	180	---	---	---	---	---	0.0007	(mg/kg)	<0.120	<3.49	<0.120	<16.7	<0.120	<0.115
2-Chloronaphthalene	6,300	160,000	160,000	---	---	---	---	---	240	(mg/kg)	<0.133	<3.87	<0.133	<18.6	<0.134	<0.128
2-Chlorophenol	390	10,000	10,000	53,000	53,000	53,000	---	---	4	(mg/kg)	<0.141	<4.10	<0.141	<19.7	<0.141	<0.135
2-Methylnaphthalene	2,300	61,000	61,000	---	---	---	83	83	29	(mg/kg)	<0.130	8	<0.130	1400	<0.130	<0.130
3,3-Dichlorobenzidine	1.0	13	280	---	---	---	---	---	0.007	(mg/kg)	<0.095	<2.78	<0.095	<13.3	<0.096	<0.092
4,6-Dinitro-o-cresol	27(1)	720(1)	71(1)	---	---	---	---	---	0.04(1)	(mg/kg)	<0.120	<3.49	<0.120	<16.7	<0.120	<0.115
4-Bromophenyl phenyl ether	---	---	---	---	---	---	---	---	---	(mg/kg)	<0.102	<2.97	<0.102	<14.3	<0.102	<0.098
4-Chlorophenyl phenyl ether	---	---	---	---	---	---	---	---	---	(mg/kg)	<0.110	<3.20	<0.110	<15.3	<0.110	<0.106
Bis(2-chloroethoxy)methane	---	---	---	---	---	---	---	---	---	(mg/kg)	<0.130	<3.78	<0.129	<18.1	<0.130	<0.125
Bis(2-chloroethyl)ether	0.6	5.0	75.0	0.2	0.5	0.7	0.5	3.7	0.0004	(mg/kg)	<0.157	<4.58	<0.157	<22.0	<0.158	<0.151
Bis(2-chloroisopropyl)ether	3100(1)	82000(1)	8200(1)	1300(1)	1300(1)	1300(1)	---	---	2.4	(mg/kg)	<0.126	<3.68	<0.126	<17.7	<0.127	<0.122
Bis(2-ethylhexyl)phthalate (BEHP)	46	410	4,100	31,000	31,000	31,000	---	---	3,600	(mg/kg)	0.836	<3.78	<0.129	<18.1	<0.130	0.667
Butyl benzyl phthalate	16,000	410,000	410,000	930	930	930	---	---	930	(mg/kg)	<0.112	<3.26	<0.112	<15.7	<0.112	<0.108
Carbazole	32	290	6,200	---	---	---	---	---	0.60	(mg/kg)	<0.140	<3.90	<0.140	<19.0	<0.140	<0.130
Dibenzofuran	310 (1)	8200 (1)	820 (1)	---	---	---	---	---	15 (1)	(mg/kg)	<0.140	<4.10	<0.140	860	<0.140	<0.130
Diethyl phthalate	63,000	1,000,000	1,000,000	2,000	2,000	2,000	---	---	470	(mg/kg)	<0.106	<3.10	<0.106	<14.9	<0.107	<0.102
Dimethyl phthalate	780,000(1)	1,000,000(1)	1,000,000(1)	1,300(1)	1,300(1)	1,300(1)	---	---	380(1)	(mg/kg)	<0.101	<2.94	<0.101	<14.1	<0.101	<0.097
Di-n-butyl phthalate	7,800	200,000	200,000	2,300	2,300	2,300	---	---	0.0004	(mg/kg)	<0.114	<3.32	<0.114	<16.0	<0.115	<0.110
Di-n-octyl phthalate	1,600	41,000	4,100	10,000	10,000	10,000	---	---	10,000	(mg/kg)	<0.115	<3.36	<0.115	<16.1	<0.116	<0.111
Hexachlorobenzene	0.4	4.0	78.0	1	1.8	2.6	0.25	0.25	2	(mg/kg)	<0.109	<3.16	<0.108	<15.2	<0.109	<0.105
Hexachlorobutadiene	16	410	41	1,000	1,000	180	---	---	2.9	(mg/kg)	<0.172	<5.00	<0.172	<24.0	<0.173	<0.165
Hexachlorocyclopentadiene	550	14,000	14,000	10	16	1.1	5.0	30.0	400	(mg/kg)	<0.113	<3.29	<0.113	<15.8	<0.114	<0.109
Hexachloroethane	78	2,000	2,000	---	---	---	160	160	0.5	(mg/kg)	<0.185	<5.39	<0.185	<25.9	<0.186	<0.178
Isophorone	15,600	410,000	410,000	4,600	4,600	4,600	1,800	1,800	8	(mg/kg)	<0.131	<3.81	<0.131	<18.3	<0.131	<0.126
m & p-Cresol(s)	390(1)	10,000(1)	1,000(1)	---	---	---	---	---	0.24(1)	(mg/kg)	<0.140	<4.07	<0.139	<19.5	<0.140	<0.134
m-Dichlorobenzene	70 (1)	1,800 (1)	180 (1)	570 (1)	570 (1)	570 (1)	---	---	0.2 (1)	(mg/kg)	<0.186	<5.42	<0.186	<26.0	<0.187	<0.179
m-Nitroaniline	---	---	---	---	---	---	---	---	---	(mg/kg)	<0.091	<2.65	<0.091	<12.7	<0.091	<0.088
Nitrobenzene	39	1,000	1,000	92	140	9.4	140.0	380.0	0.1	(mg/kg)	<0.139	<4.03	<0.138	<19.4	<0.139	<0.133
N-Nitrosodiphenylamine	130	1,200	25,000	---	---	---	---	---	1	(mg/kg)	<0.102	<2.97	<0.102	<14.3	<0.102	<0.098
N-Nitrosodipropylamine	0.09	0.8	18	---	---	---	0.43	3.1	0.00005	(mg/kg)	<0.122	<3.55	<0.122	<17.1	<0.122	<0.117
o-Cresol	3,900	100,000	100,000	---	---	---	---	---	15	(mg/kg)	<0.130	<3.80	<0.130	<18.0	<0.130	<0.130
o-Dichlorobenzene	7,000	180,000	560	560	18,000	310	---	---	17	(mg/kg)	<0.176	<5.13	<0.176	<24.6	<0.177	<0.170
o-Nitroaniline	---	---	---	73(1)	120(1)	7.5(1)	---	---	---	(mg/kg)	<0.101	<2.94	<0.101	<14.1	<0.101	<0.097
o-Nitrophenol	---	---	---	---	---	---	---	---	---	(mg/kg)	<0.124	<3.62	<0.124	<17.4	<0.125	<0.119
p-Chloroaniline	310	8,200	---	---	820	---	---	---	0.7	(mg/kg)	<0.134	<3.91	<0.134	<18.8	<0.135	<0.129
p-Chloro-m-cresol	---	---	---	---	---	---	---	---	---	(mg/kg)	<0.122	<3.55	<0.122	<17.1	<0.122	<0.117
PCP	3	24	52	---	---	---	---	---	0.03	(mg/kg)	<0.732	<21.3	<0.730	<102	<0.735	<0.704
p-Dichlorobenzene	---	---	---	11,000	17,000	340	---	---	2	(mg/kg)	<0.176	<5.13	<0.176	<24.6	<0.177	<0.170
Phenol	47,000	1,000,000	120,000	---	---	---	---	---	100	(mg/kg)	<0.130	<3.70	<0.130	<18.0	<0.130	<0.120
p-Nitroaniline	---	---	---	---	---	---	---	---	---	(mg/kg)	<0.101	<2.94	<0.101	<14.1	<0.101	<0.097
p-Nitrophenol	---	---	---	---	---	---	---	---	---	(mg/kg)	<0.109	<3.16	<0.108	<15.2	<0.109	<0.105

Notes:
- mg/kg — Milligrams per kilogram
- (1) — Provisional remediation objective provided by IEPA
- ----- — No remediation objective has been established by the IEPA for this constituent for this exposure route
- <12 — Not detected at the level identified
- Analytical result exceeds one or more Tier 1 RO

TABLE 3-12
TIER 1 COMPARISON SVOC RESULTS FOR GREATER THAN 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remediation Objectives - Soil										B-553	B-556	B-557
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to Groundwater		B-553-32 (31-32)	B-556-28 (27-28)	B-557-12 (11-12)
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)	UNITS/DEPTH	7/14/2004 31'-32'	7/20/2004 27'-28'	7/20/2004 11'-12'
1,2,4-Trichlorobenzene	780	20,000	35	3,200	3,200	920	220	980	5	(mg/kg)	<0.145	<0.143	<0.329
2,4,5-Trichlorophenol	7,800	200,000	200,000	---	---	---	---	---	270	(mg/kg)	<0.104	<0.102	<0.235
2,4,6-Trichlorophenol	58	520	11,000	200	390	540	---	---	0.2	(mg/kg)	<0.137	<0.135	<0.311
2,4-Dichlorophenol	230	6,100	610	---	---	---	---	---	1	(mg/kg)	<0.132	<0.130	<0.299
2,4-Dimethylphenol	1,600	41,000	41,000	---	---	---	---	---	9	(mg/kg)	<0.140	<0.140	<0.310
2,4-Dinitrophenol	160	4,100	410	---	---	---	---	---	0.2	(mg/kg)	<0.117	<0.115	<0.264
2,4-Dinitrotoluene	0.9	8.4	180	---	---	---	---	---	0.0008	(mg/kg)	<0.113	<0.112	<0.257
2,6-Dinitrotoluene	0.9	8.4	180	---	---	---	---	---	0.0007	(mg/kg)	<0.118	<0.116	<0.267
2-Chloronaphthalene	6,300	160,000	160,000	---	---	---	---	---	240	(mg/kg)	<0.131	<0.129	<0.296
2-Chlorophenol	390	10,000	10,000	53,000	53,000	53,000	---	---	4	(mg/kg)	<0.138	<0.136	<0.314
2-Methylnaphthalene	2,300	61,000	61,000	---	---	---	83	83	29	(mg/kg)	<0.130	<0.130	<0.290
3,3-Dichlorobenzidine	1.0	13	280	---	---	---	---	---	0.007	(mg/kg)	<0.094	<0.092	<0.212
4,6-Dinitro-o-cresol	27(1)	720(1)	71(1)	---	---	---	---	---	0.04(1)	(mg/kg)	<0.118	<0.116	<0.267
4-Bromophenyl phenyl ether	---	---	---	---	---	---	---	---	---	(mg/kg)	<0.100	<0.099	<0.227
4-Chlorophenyl phenyl ether	---	---	---	---	---	---	---	---	---	(mg/kg)	<0.108	<0.106	<0.245
Bis(2-chloroethoxy)methane	---	---	---	---	---	---	---	---	---	(mg/kg)	<0.128	<0.125	<0.289
Bis(2-chloroethyl)ether	0.6	5.0	75.0	0.2	0.5	0.7	0.5	3.7	0.0004	(mg/kg)	<0.155	<0.152	<0.351
Bis(2-chloroisopropyl)ether	3100(1)	82000(1)	8200(1)	1300(1)	1300(1)	1300(1)	---	---	2.4	(mg/kg)	<0.124	<0.122	<0.282
Bis(2-ethylhexyl)phthalate (BEHP)	46	410	4,100	31,000	31,000	31,000	---	---	3,600	(mg/kg)	0.3	0.25	<0.289
Butyl benzyl phthalate	16,000	410,000	410,000	930	930	930	---	---	930	(mg/kg)	<0.110	<0.108	<0.250
Carbazole	32	290	6,200	---	---	---	---	---	0.60	(mg/kg)	<0.130	<0.130	<0.300
Dibenzofuran	310 (1)	8200 (1)	820 (1)	---	---	---	---	---	15 (1)	(mg/kg)	<0.140	<0.140	0.54
Diethyl phthalate	63,000	1,000,000	1,000,000	2,000	2,000	2,000	---	---	470	(mg/kg)	<0.105	<0.103	<0.237
Dimethyl phthalate	780,000(1)	1,000,000(1)	1,000,000(1)	1,300(1)	1,300(1)	1,300(1)	---	---	380(1)	(mg/kg)	<0.099	<0.098	<0.225
Di-n-butyl phthalate	7,800	200,000	200,000	2,300	2,300	2,300	---	---	0.0004	(mg/kg)	<0.112	<0.110	<0.254
Di-n-octyl phthalate	1,600	41,000	4,100	10,000	10,000	10,000	---	---	10,000	(mg/kg)	<0.113	<0.112	<0.257
Hexachlorobenzene	0.4	4.0	78.0	1	1.8	2.6	0.25	0.25	2	(mg/kg)	<0.107	<0.105	<0.242
Hexachlorobutadiene	16	410	41	1,000	1,000	180	---	---	2.9	(mg/kg)	<0.169	<0.166	<0.383
Hexachlorocyclopentadiene	550	14,000	14,000	10	16	1.1	5.0	30.0	400	(mg/kg)	<0.111	<0.109	<0.252
Hexachloroethane	78	2,000	2,000	---	---	---	160	160	0.5	(mg/kg)	<0.182	<0.179	<0.413
Isophorone	15,600	410,000	410,000	4,600	4,600	4,600	1,800	1,800	8	(mg/kg)	<0.129	<0.127	<0.292
m & p-Cresol(s)	390(1)	10,000(1)	1,000(1)	---	---	---	---	---	0.24(1)	(mg/kg)	<0.137	<0.135	<0.311
m-Dichlorobenzene	70 (1)	1,800 (1)	180 (1)	570 (1)	570 (1)	570 (1)	---	---	0.2 (1)	(mg/kg)	<0.183	<0.180	<0.415
m-Nitroaniline	---	---	---	---	---	---	---	---	---	(mg/kg)	<0.089	<0.088	<0.203
Nitrobenzene	39	1,000	1,000	92	140	9.4	140.0	380.0	0.1	(mg/kg)	<0.136	<0.134	<0.309
N-Nitrosodiphenylamine	130	1,200	25,000	---	---	---	---	---	1	(mg/kg)	<0.100	<0.099	<0.227
N-Nitrosodipropylamine	0.09	0.8	18	---	---	---	0.43	3.1	0.00005	(mg/kg)	<0.120	<0.118	<0.272
o-Cresol	3,900	100,000	100,000	---	---	---	---	---	15	(mg/kg)	<0.130	<0.130	<0.290
o-Dichlorobenzene	7,000	180,000	560	560	18,000	310	---	---	17	(mg/kg)	<0.173	<0.171	<0.393
o-Nitroaniline	---	---	---	73(1)	120(1)	7.5(1)	---	---	---	(mg/kg)	<0.099	<0.098	<0.225
o-Nitrophenol	---	---	---	---	---	---	---	---	---	(mg/kg)	<0.122	<0.120	<0.277
p-Chloroaniline	310	8,200	---	---	820	---	---	---	0.7	(mg/kg)	<0.132	<0.130	<0.299
p-Chloro-m-cresol	---	---	---	---	---	---	---	---	---	(mg/kg)	<0.120	<0.118	<0.272
PCP	3	24	52	---	---	---	---	---	0.03	(mg/kg)	<0.720	<0.708	<1.63
p-Dichlorobenzene	---	---	---	11,000	17,000	340	---	---	2	(mg/kg)	<0.173	<0.171	<0.393
Phenol	47,000	1,000,000	120,000	---	---	---	---	---	100	(mg/kg)	<0.130	<0.120	<0.290
p-Nitroaniline	---	---	---	---	---	---	---	---	---	(mg/kg)	<0.099	<0.098	<0.225
p-Nitrophenol	---	---	---	---	---	---	---	---	---	(mg/kg)	<0.107	<0.105	<0.242

Notes:

mg/kg	Milligrams per kilogram
(1)	Provisional remediation objective provided by IEPA
-----	No remediation objective has been established by the IEPA for this constituent for this exposure route
<12	Not detected at the level identified
	Analytical result exceeds one or more Tier 1 RO

TABLE 3-13
GROUNDWATER ANALYTICAL RESULTS - SVOC's
CHAMPAIGN MGP
AMERENIP

CONSTITUENT	Class I Groundwater Standard	Units	UMW-102 9/16/2008	UMW-104 9/17/2008	UMW-105 9/16/2008	UMW-106 9/16/2008	UMW-107 9/16/2008	UMW-108 9/17/2008	UMW-109 9/17/2008	UMW-110 9/17/2008	UMW-111A 9/17/2008	UMW-113 9/16/2008	UMW-113 D 9/16/2008	UMW-114 9/16/2008	UMW-115 9/16/2008	UMW-116 9/16/2008	UMW-117 9/17/2008
Semivolatile Organic Compounds (8270C SIMS)																	
Acenaphthene	0.42	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0346	<0.0001	0.0224	0.0146	0.0906	0.00919	<0.0001	<0.0001
Acenaphthylene	0.21 (1)	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	0.00029	<0.0001	<0.0001	0.105	<0.0001	0.0198	0.0127	0.0309	0.00252	<0.0001	<0.0001
Anthracene	2.1	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	0.00009	<0.0001	<0.0001	0.00818	<0.0001	0.00045	0.00025	0.00195	0.00038	<0.0001	<0.0001
Benzo(a)anthracene	0.00013	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00029	<0.0001	<0.0001	<0.0001	0.00012	<0.0001	<0.0001	<0.0001
Benzo(a)pyrene	0.0002	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	<0.0001	<0.0001	<0.0001
Benzo(b)fluoranthene	0.00018	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	<0.0001	<0.0001	<0.0001
Benzo(g,h,i)perylene	0.21 (1)	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	<0.0001	<0.0001	<0.0001
Benzo(k)fluoranthene	0.00017	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	<0.0001	<0.0001	<0.0001
Bis(2-ethylhexyl)phthalate	0.006	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chrysene	0.0015	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00019	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dibenzo(a,h)anthracene	0.0003	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	<0.0001	<0.0001	<0.0001
Diethyl phthalate	5.6	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Dimethyl phthalate	70.0	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1	<0.001	<0.001	<0.001
Di-n-butyl phthalate	0.7	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.00076	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fluoranthene	0.28	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00317	<0.0001	<0.0001	<0.0001	0.00052	<0.0001	<0.0001	<0.0001
Fluorene	0.28	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0119	<0.0001	0.00084	0.00056	0.0212	0.00366	<0.0001	<0.0001
Indeno(1,2,3-cd)pyrene	0.00043	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	<0.0001	<0.0001	<0.0001
m,p-Cresol	0.035 (1)	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00039	0.0001	<0.0001	0.0005
Naphthalene	0.14	mg/L	0.00009	0.00009	0.00009	0.00009	0.13	<0.0001	<0.0001	0.00921	<0.0001	0.00064	0.00049	4.08	0.00031	0.00009	<0.0001
o-Cresol	0.35	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	<0.0001	<0.0001	<0.0001
Phenanthrene	0.21 (1)	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0443	<0.0001	<0.0001	<0.0001	0.00834	<0.0001	<0.0001	<0.0001
Pyrene	0.21	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00412	<0.0001	<0.0001	<0.0001	0.00059	<0.0001	<0.0001	<0.0001
Total PNAs except Naphthalene		mg/L	<0.00013	<0.00013	<0.00013	<0.00013	0.00038	<0.00013	<0.00013	0.185	<0.00013	0.0434	0.0281	0.133	0.0157	<0.00013	<0.00013

Notes:

ug/L Micrograms per liter
(1) Non-TACO or provisional RO provided by the IEPA
Constituent exceeds Class I Groundwater Standard
<5 Not detected at the method limit identified

TABLE 3-13
GROUNDWATER ANALYTICAL RESULTS - SVOC's
CHAMPAIGN MGP
AMERENIP

CONSTITUENT	Class I Groundwater Standard	Units	UMW-118 9/17/2008	UMW-119 9/16/2008	UMW-120 9/16/2008	UMW-121 9/16/2008	UMW-300 9/18/2008	UMW-301 9/17/2008	UMW-302 9/16/2008	UMW-303 9/17/2008	UMW-303 D 9/17/2008	UMW-304 9/16/2008	UMW-305 9/16/2008	UMW-306 9/16/2008	UMW-307 9/16/2008
Semivolatile Organic Compounds (8270C SIMS)															
Acenaphthene	0.42	mg/L	<0.0001	0.00136	<0.0001	<0.0001	<0.0001	0.00105	<0.0001	<0.0001	<0.0001	0.0126	<0.0001	<0.0001	<0.0001
Acenaphthylene	0.21 (1)	mg/L	<0.0001	0.00129	<0.0001	0.00014	<0.0001	0.0106	0.00019	<0.0001	<0.0001	0.00134	<0.0001	<0.0001	<0.0001
Anthracene	2.1	mg/L	<0.0001	0.00014	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(a)anthracene	0.00013	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	<0.0001
Benzo(a)pyrene	0.0002	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	<0.0001
Benzo(b)fluoranthene	0.00018	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	<0.0001
Benzo(g,h,i)perylene	0.21 (1)	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	<0.0001
Benzo(k)fluoranthene	0.00017	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	<0.0001
Bis(2-ethylhexyl)phthalate	0.006	mg/L	<0.002	0.00252	0.00203	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00346	<0.002
Chrysene	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	<0.0001
Dibenzo(a,h)anthracene	0.0003	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	<0.0001
Diethyl phthalate	5.6	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Dimethyl phthalate	70.0	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Di-n-butyl phthalate	0.7	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fluoranthene	0.28	mg/L	<0.0001	0.00014	<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	mg/L	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Indeno(1,2,3-cd)pyrene	0.00043	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	<0.0001
m,p-Cresol	0.035 (1)	mg/L	0.0005	<0.0001	<0.0001	<0.0001	<0.0001	0.0187	0.00112	0.00191	0.00102	<0.0001	<0.0001	<0.0001	<0.0001
Naphthalene	0.14	mg/L	<0.0001	0.00158	<0.0001	0.00086	<0.0001	0.0003	0.246	<0.0001	<0.0001	0.0315	0.00009	<0.0001	0.00009
o-Cresol	0.35	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	<0.0001
Phenanthrene	0.21 (1)	mg/L	<0.0001	0.00047	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Pyrene	0.21	mg/L	<0.0001	0.00019	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total PNAs except Naphthalene		mg/L	<0.00013	0.00378	<0.00013	0.00014	<0.00013	0.0117	0.00019	<0.00013	<0.00013	0.014	<0.00013	<0.00013	<0.00013

Notes:

ug/L Micrograms per liter
(1) Non-TACO or provisional RO provided by the IEPA
Constituent exceeds Class I Groundwater Standard
<5 Not detected at the method limit identified

TABLE 3-13
GROUNDWATER ANALYTICAL RESULTS - SVOC's
CHAMPAIGN MGP
AMERENIP

CONSTITUENT	Class I Groundwater Standard	Units	UMW-102 9/16/2008	UMW-104 9/17/2008	UMW-105 9/16/2008	UMW-106 9/16/2008	UMW-107 9/16/2008	UMW-108 9/17/2008	UMW-109 9/17/2008	UMW-110 9/17/2008	UMW-111A 9/17/2008	UMW-113 9/16/2008	UMW-113 D 9/16/2008	UMW-114 9/16/2008	UMW-115 9/16/2008	UMW-116 9/16/2008	UMW-117 9/17/2008
Semivolatile Organic Compounds (8270C)																	
1,2,4-Trichlorobenzene	0.07	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.5	<0.01	<0.01	<0.01
1,2-Dichlorobenzene	0.6	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,3-Dichlorobenzene	0.0063 (1)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,4-Dichlorobenzene	0.075	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2,4,5-Trichlorophenol	0.7	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.5	<0.01	<0.01	<0.01
2,4,6-Trichlorophenol	0.01	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.5	<0.01	<0.01	<0.01
2,4-Dichlorophenol	0.021	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.5	<0.01	<0.01	<0.01
2,4-Dimethylphenol	0.14	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.5	<0.01	<0.01	<0.01
2,4-Dinitrophenol	0.014	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
2,4-Dinitrotoluene	0.00002	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2,6-Dinitrotoluene	0.00031	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-Chloronaphthalene	0.56 (1)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.5	<0.01	<0.01	<0.01
2-Chlorophenol	0.035	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-Methylnaphthalene	0.028 (1)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.18	<0.01	<0.01	<0.01
2-Nitroaniline	---	mg/L	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<2	<0.04	<0.04	<0.04
2-Nitrophenol	---	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<1	<0.02	<0.02	<0.02
3,3´-Dichlorobenzidine	0.02	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
3-Nitroaniline	---	mg/L	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
4,6-Dinitro-2-methylphenol	0.0098 (1)	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
4-Bromophenyl phenyl ether	---	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
4-Chloro-3-methylphenol	0.49 (1)	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<1	<0.02	<0.02	<0.02
4-Chloroaniline	0.028	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<1	<0.02	<0.02	<0.02
4-Chlorophenyl phenyl ether	---	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
4-Nitroaniline	---	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
4-Nitrophenol	---	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Bis(2-chloroethoxy)methane	---	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.5	<0.01	<0.01	<0.01
Bis(2-chloroethyl)ether	0.01	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bis(2-chloroisopropyl)ether	0.28 (1)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Butyl benzyl phthalate	1.4	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Carbazole	---	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.004	<0.02	<0.02	<0.02	0.011	0.004	0.004	<0.02
Dibenzofuran	0.028 (1)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	0.006	0.01	0.01	0.01
Dimethyl phthalate	70 (1)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Di-n-octyl phthalate	0.14	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Hexachlorobenzene	0.00006	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Hexachlorobutadiene	0.0014 (1)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.5	<0.01	<0.01	<0.01
Hexachlorocyclopentadiene	0.05	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<1	<0.02	<0.02	<0.02
Hexachloroethane	0.007	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Isophorone	1.4	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.5	<0.01	<0.01	<0.01
Nitrobenzene	0.0035	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.5	<0.01	<0.01	<0.01
N-Nitroso-di-n-propylamine	0.0018	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
N-Nitrosodiphenylamine	0.0032	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Pentachlorophenol	0.001	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Phenol	0.1	mg/L	<0.005	<0.005	<0.005	<0.005	0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Notes:

ug/L Micrograms per liter
(1) Non-TACO or provisional RO provided by the IEPA
Constituent exceeds Class I Groundwater Standard
<5 Not detected at the method limit identified

TABLE 3-13
GROUNDWATER ANALYTICAL RESULTS - SVOC's
CHAMPAIGN MGP
AMERENIP

CONSTITUENT	Class I Groundwater Standard	Units	UMW-118 9/17/2008	UMW-119 9/16/2008	UMW-120 9/16/2008	UMW-121 9/16/2008	UMW-300 9/18/2008	UMW-301 9/17/2008	UMW-302 9/16/2008	UMW-303 9/17/2008	UMW-303 D 9/17/2008	UMW-304 9/16/2008	UMW-305 9/16/2008	UMW-306 9/16/2008	UMW-307 9/16/2008
Semivolatile Organic Compounds (8270C)															
1,2,4-Trichlorobenzene	0.07	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2-Dichlorobenzene	0.6	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,3-Dichlorobenzene	0.0063 (1)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,4-Dichlorobenzene	0.075	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2,4,5-Trichlorophenol	0.7	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2,4,6-Trichlorophenol	0.01	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2,4-Dichlorophenol	0.021	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2,4-Dimethylphenol	0.14	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2,4-Dinitrophenol	0.014	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
2,4-Dinitrotoluene	0.00002	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2,6-Dinitrotoluene	0.00031	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-Chloronaphthalene	0.56 (1)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-Chlorophenol	0.035	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-Methylnaphthalene	0.028 (1)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	0.002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-Nitroaniline	---	mg/L	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
2-Nitrophenol	---	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
3,3´-Dichlorobenzidine	0.02	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
3-Nitroaniline	---	mg/L	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
4,6-Dinitro-2-methylphenol	0.0098 (1)	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
4-Bromophenyl phenyl ether	---	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
4-Chloro-3-methylphenol	0.49 (1)	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
4-Chloroaniline	0.028	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
4-Chlorophenyl phenyl ether	---	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
4-Nitroaniline	---	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
4-Nitrophenol	---	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Bis(2-chloroethoxy)methane	---	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bis(2-chloroethyl)ether	0.01	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bis(2-chloroisopropyl)ether	0.28 (1)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Butyl benzyl phthalate	1.4	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Carbazole	---	mg/L	<0.02	0.004	<0.002	<0.002	<0.002	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Dibenzofuran	0.028 (1)	mg/L	0.01	0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dimethyl phthalate	70 (1)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Di-n-octyl phthalate	0.14	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Hexachlorobenzene	0.00006	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Hexachlorobutadiene	0.0014 (1)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Hexachlorocyclopentadiene	0.05	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Hexachloroethane	0.007	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Isophorone	1.4	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrobenzene	0.0035	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
N-Nitroso-di-n-propylamine	0.0018	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
N-Nitrosodiphenylamine	0.0032	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Pentachlorophenol	0.001	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Phenol	0.1	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Notes:

ug/L Micrograms per liter
(1) Non-TACO or provisional RO provided by the IEPA
Constituent exceeds Class I Groundwater Standard
<5 Not detected at the method limit identified

TABLE 3-14
TIER 1 COMPARISON - METALS and CYANIDE RESULTS FOR 0 TO 3 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remedial Objectives - Soil												B-814	B-822	B-501	B-502	B-503	B-504	B-505	B-506
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to Groundwater	*MSA*			B-814 (0.0-2.0)	B-822 (1.0-3.0)	B-501-2	B-502-3	B-503-3	B-504-3	B-505-3	B-506-3
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)*	*Background*	UNITS		4/1/2008 0.0-2.0	4/1/2008 1.0-3.0	7/13/2004 1'-2'	7/13/2004 2'-3'	7/13/2004 2'-3'	7/13/2004 2'-3'	7/14/2004 2'-3'	7/22/2004 2'-3'
Arsenic	13.0	13.0	61.0	750	1,200	25,000	---	---	30	13	(mg/kg)		5.29	3.45	9.28	58.5	8.31	15.4	4.5	14.7
Barium	5,500	140,000	14,000	690,000	910,000	870,000	---	---	1,800	110	(mg/kg)		---	---	143	58.3	99.6	152	27.1	113
Cadmium	78	2,000	200	1,800	2,800	59,000	---	---	59	0.6	(mg/kg)		---	---	0.28	0.5	0.3	1.68	0.58	0.14
Chromium	230	6,100	4,100	270	420	690	---	---	32	16.2	(mg/kg)		23.4	24.9	19.6	8.81	18.1	13.6	12.6	15.7
Copper	2,900	82,000	8,200	---	---	---	---	---	330,000	19.60	(mg/kg)		---	---	---	---	---	---	---	---
Cyanide[(a)]	1,600	41,000	4,100	---	---	---	---	---	40	0.51	(mg/kg)		<0.92	<6.24	1.38	1.02	11.7	55.5	25.2	2.31
Iron	---	---	---	---	---	---	---	---	---	15,900	(mg/kg)		---	---	---	---	---	---	---	---
Lead	400	800	700	---	---	---	---	---	107	36	(mg/kg)		53.3	17.3	58	21.7	202	221	552	177
Manganese	1,600	41,000	4,100	69,000	91,000	8,700	---	---	---	636	(mg/kg)		---	---	---	---	---	---	---	---
Mercury	23	610	61	10	16	0.10	0.45	0.45	6.4	0.06	(mg/kg)		---	---	0.215	0.037	0.167	0.338	0.061	0.695
Nickel	1,600	41,000	4,100	13,000	21,000	440,000	---	---	700	18	(mg/kg)		---	---	---	---	---	---	---	---
Selenium	390	10,000	1,000	---	---	---	---	---	3.3	0.48	(mg/kg)		---	---	**<4.00**	**<3.85**	**<4.00**	**<3.92**	**<4.00**	**<3.85**
Silver	390	10,000	1,000	---	---	---	---	---	39	0.55	(mg/kg)		---	---	<1.00	<0.96	<1.00	<0.98	<1.00	<0.96
Zinc	23,000	610,000	61,000	---	---	---	---	---	16,000	95	(mg/kg)		---	---	---	---	---	---	---	---

Notes:

mg/kg	Milligrams per kilogram
(a)	Remedial objectives are for amenable cyanide.
-----	No remediation objective has been established by the IEPA for this constituent for this exposure route
<12	Not detected at the level identified
*	Based on an average pH of 7.50 for the site
	Analytical result exceeds one or more Tier 1 RO
<0.05	Detection limit greater than RO due to dilution

TABLE 3-14
TIER 1 COMPARISON - METALS and CYANIDE RESULTS FOR 0 TO 3 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remedial Objectives - Soil												B-507	B-508	B-509	B-510	B-512	B-513	B-514	B-515
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to Groundwater	*MSA*			B-507-1	B-508-3	B-509-3	B-510-2	B-512-3	B-513-2	B-514-3	B-515-2
													7/21/2004	7/19/2004	7/21/2004	7/12/2004	7/12/2004	7/12/2004	7/22/2004	7/16/2004
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)*	*Background*	UNITS		0-1'	2'-3'	2'-3'	1'-2'	2'-3'	1'-2'	2'-3'	1'-2'
Arsenic	13.0	13.0	61.0	750	1,200	25,000	---	---	30	13	(mg/kg)		10.1	22.5	13	10.8	21.6	13.6	11.3	11.5
Barium	5,500	140,000	14,000	690,000	910,000	870,000	---	---	1,800	110	(mg/kg)		141	96.4	184	84.6	98	129	128	136
Cadmium	78	2,000	200	1,800	2,800	59,000	---	---	59	0.6	(mg/kg)		0.22	0.55	1.03	0.58	1.01	0.36	0.29	0.36
Chromium	230	6,100	4,100	270	420	690	---	---	32	16.2	(mg/kg)		16	13.2	18.3	16	26.7	22.4	15.7	14
Copper	2,900	82,000	8,200	---	---	---	---	---	330,000	19.60	(mg/kg)		---	---	---	---	---	---	---	---
Cyanide[(a)]	1,600	41,000	4,100	---	---	---	---	---	40	0.51	(mg/kg)		2.15	2.51	2.74	6.43	68.4	17	16.6	3.68
Iron	---	---	---	---	---	---	---	---	---	15,900	(mg/kg)		---	---	---	---	---	---	---	---
Lead	400	800	700	---	---	---	---	---	107	36	(mg/kg)		60.8	49.8	164	128	158	470	113	36.1
Manganese	1,600	41,000	4,100	69,000	91,000	8,700	---	---	---	636	(mg/kg)		---	---	---	---	---	---	---	---
Mercury	23	610	61	10	16	0.10	0.45	0.45	6.4	0.06	(mg/kg)		0.084	0.174	0.252	0.432	0.291	0.352	4.2	0.091
Nickel	1,600	41,000	4,100	13,000	21,000	440,000	---	---	700	18	(mg/kg)		---	---	---	---	---	---	---	---
Selenium	390	10,000	1,000	---	---	---	---	---	3.3	0.48	(mg/kg)		**<3.85**	**<3.85**	**<4.00**	**<3.85**	**<3.92**	**<4.00**	**<3.85**	**<3.77**
Silver	390	10,000	1,000	---	---	---	---	---	39	0.55	(mg/kg)		<0.96	<0.96	<1.00	<0.96	<0.98	<1.00	<0.96	<0.94
Zinc	23,000	610,000	61,000	---	---	---	---	---	16,000	95	(mg/kg)		---	---	---	---	---	---	---	---

Notes:

mg/kg	Milligrams per kilogram
(a)	Remedial objectives are for amenable cyanide.
-----	No remediation objective has been established by the IEPA for this constituent for this exposure route
<12	Not detected at the level identified
*	Based on an average pH of 7.50 for the site
	Analytical result exceeds one or more Tier 1 RO
<0.05	Detection limit greater than RO due to dilution

TABLE 3-14
TIER 1 COMPARISON - METALS and CYANIDE RESULTS FOR 0 TO 3 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remedial Objectives - Soil												B-516	B-550	B-551	B-553	B-554	B-556	B-557	CSS-3
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to Groundwater	*MSA*			B-516-3	B-550-3	B-551-3	B-553-3	B-554-3	B-556-3	B-557-1	
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)*	*Background*	UNITS		7/22/2004	7/20/2004	7/15/2004	7/14/2004	7/15/2004	7/20/2004	7/20/2004	12/18/1990
													2'-3'	2'-3'	2'-3'	2'-3'	2'-3'	2'-3'	0-1'	0-6"
Arsenic	13.0	13.0	61.0	750	1,200	25,000	---	---	30	13	(mg/kg)		28.7	11.6	10.7	<2.40	19.3	2.2	9.68	3
Barium	5,500	140,000	14,000	690,000	910,000	870,000	---	---	1,800	110	(mg/kg)		134	45.6	60.5	20.1	207	59.8	102	82
Cadmium	78	2,000	200	1,800	2,800	59,000	---	---	59	0.6	(mg/kg)		1.36	2.04	0.39	<0.19	0.97	0.13	0.59	1
Chromium	230	6,100	4,100	270	420	690	---	---	32	16.2	(mg/kg)		40.3	22.3	10.3	7.23	16.3	9.54	15.6	6
Copper	2,900	82,000	8,200	---	---	---	---	---	330,000	19.60	(mg/kg)		---	---	---	---	---	---	---	17
Cyanide[(a)]	1,600	41,000	4,100	---	---	---	---	---	40	0.51	(mg/kg)		41.6	9.82	3	1.81	3.01	2.98	1.01	7
Iron	---	---	---	---	---	---	---	---	---	15,900	(mg/kg)		---	---	---	---	---	---	---	14000
Lead	400	800	700	---	---	---	---	---	107	36	(mg/kg)		165	32.1	50.6	8.5	252	55.7	184	80
Manganese	1,600	41,000	4,100	69,000	91,000	8,700	---	---	---	636	(mg/kg)		---	---	---	---	---	---	---	830
Mercury	23	610	61	10	16	0.10	0.45	0.45	6.4	0.06	(mg/kg)		0.491	0.076	0.281	0.005	0.076	0.075	0.133	---
Nickel	1,600	41,000	4,100	13,000	21,000	440,000	---	---	700	18	(mg/kg)		---	---	---	---	---	---	---	12
Selenium	390	10,000	1,000	---	---	---	---	---	3.3	0.48	(mg/kg)		**<4.00**	**<4.00**	**<3.92**	**<3.85**	**<3.64**	**<3.85**	**<3.85**	---
Silver	390	10,000	1,000	---	---	---	---	---	39	0.55	(mg/kg)		<1.00	<1.00	<0.98	<0.96	<0.91	<0.96	<0.96	---
Zinc	23,000	610,000	61,000	---	---	---	---	---	16,000	95	(mg/kg)		---	---	---	---	---	---	---	74

Notes:

mg/kg	Milligrams per kilogram
(a)	Remedial objectives are for amenable cyanide.
-----	No remediation objective has been established by the IEPA for this constituent for this exposure route
<12	Not detected at the level identified
*	Based on an average pH of 7.50 for the site
	Analytical result exceeds one or more Tier 1 RO
<0.05	Detection limit greater than RO due to dilution

TABLE 3-14
TIER 1 COMPARISON - METALS and CYANIDE RESULTS FOR 0 TO 3 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remedial Objectives - Soil												CSS-4	CSS-5	UTP-01	UTP-02	UTP-03	UTP-04	UTP-08	UTP-09
		Ingestion			*Inhalation*			*Indoor Inhalation*		Soil Component to Groundwater	*MSA*									
CONSTITUENT	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	(Class I)*	*Background*	UNITS		12/18/1990 0-6"	12/19/1990 0-6"	12/17/1991 1	12/17/1991 1.25	12/17/1991 1.42	12/17/1991 1	12/17/1991 1	12/17/1991 0.83
Arsenic	13.0	13.0	61.0	750	1,200	25,000	---	---	30	13	(mg/kg)		5	5	6	9	9	15	4	21
Barium	5,500	140,000	14,000	690,000	910,000	870,000	---	---	1,800	110	(mg/kg)		69	91	100	110	99	61	120	120
Cadmium	78	2,000	200	1,800	2,800	59,000	---	---	59	0.6	(mg/kg)		1	<0.5	1	1	1	1	<0.5	<0.5
Chromium	230	6,100	4,100	270	420	690	---	---	32	16.2	(mg/kg)		7	13	15	37	13	19	30	26
Copper	2,900	82,000	8,200	---	---	---	---	---	330,000	19.60	(mg/kg)		19	10	10	92	41	18	260	38
Cyanide[(a)]	1,600	41,000	4,100	---	---	---	---	---	40	0.51	(mg/kg)		2	<0.25	2	33	33	2900	620	3800
Iron	---	---	---	---	---	---	---	---	---	15,900	(mg/kg)		12000	15000	13000	16000	9500	46000	100000	110000
Lead	400	800	700	---	---	---	---	---	107	36	(mg/kg)		200	20	18	130	47	300	11000	1800
Manganese	1,600	41,000	4,100	69,000	91,000	8,700	---	---	---	636	(mg/kg)		630	530	730	71	340	170	430	330
Mercury	23	610	61	10	16	0.10	0.45	0.45	6.4	0.06	(mg/kg)		3	<0.4	<0.13	1	---	1	3	1
Nickel	1,600	41,000	4,100	13,000	21,000	440,000	---	---	700	18	(mg/kg)		10	14	15	8	11	8	12	10
Selenium	390	10,000	1,000	---	---	---	---	---	3.3	0.48	(mg/kg)		---	---	---	---	---	---	---	---
Silver	390	10,000	1,000	---	---	---	---	---	39	0.55	(mg/kg)		---	---	---	---	---	---	---	---
Zinc	23,000	610,000	61,000	---	---	---	---	---	16,000	95	(mg/kg)		95	47	41	64	89	46	230	110

Notes:

mg/kg	Milligrams per kilogram
(a)	Remedial objectives are for amenable cyanide.
-----	No remediation objective has been established by the IEPA for this constituent for this exposure route
<12	Not detected at the level identified
*	Based on an average pH of 7.50 for the site
	Analytical result exceeds one or more Tier 1 RO
<0.05	Detection limit greater than RO due to dilution

TABLE 3-15
TIER 1 COMPARISON - RCRA METALS AND CYANIDE RESULTS FOR 3 TO 10 FT
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remedial Objectives - Soil											B-814	B-818	B-822	B-823	B-829	B-833
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to Groundwater	*MSA*		B-814 (7.0-8.0)	B-818 (7.0-9.0)	B-822 (6.0-8.0)	B-822(13.0-15.0)	B829(6.0-7.0)	B833(9.0-10.0)
												4/1/2008	4/7/2008	4/1/2008	4/1/2008	4/2/2008	4/2/2008
CONSTITUENT	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**	**(Class I)***	***Background***	**UNITS**	**7.0-8.0**	**7.0-9.0**	**6.0-8.0**	**13.0-15.0**	**6.0-7.0**	**9.0-10.0**
Arsenic	13.0	13.0	61.0	750	1,200	25,000	---	---	30	13	(mg/kg)	10.1	5.49	9.97	9.99	8.84	2.92
Barium	5,500	140,000	14,000	690,000	910,000	870,000	---	---	1,800	110	(mg/kg)	---	---	---	---	---	---
Cadmium	78	2,000	200	1,800	2,800	59,000	---	---	59	0.6	(mg/kg)	---	---	---	---	---	---
Chromium	230	6,100	4,100	270	420	690	---	---	28	16.2	(mg/kg)	14.2	24.1	26.4	18.5	22.9	24.2
Cyanide[(a)]	1,600	41,000	4,100	---	---	---	---	---	40	0.51	(mg/kg)	11.1	2.12	33.1	0.25	1.02	1.31
Lead	400	800	700	---	---	---	---	---	107	36	(mg/kg)	10.1	20.2	15.9	12.8	14.9	19.7
Mercury	23	610	61	10	16	0.10	0.45	0.45	6.4	0.06	(mg/kg)	---	---	---	---	---	---
Selenium	390	10,000	1,000	---	---	---	---	---	3.3	0.48	(mg/kg)	---	---	---	---	---	---
Silver	390	10,000	1,000	---	---	---	---	---	39	0.55	(mg/kg)	---	---	---	---	---	---

Notes:

mg/kg	Milligrams per kilogram
(a)	Remedial objectives are for amenable cyanide
-----	No remediation objective has been established by the IEPA for this constitiuent for this exposure route
<12	Not detected at the level identified
*	Based on an average pH of 7.50 for the site
	Analytical result exceeds one or more Tier 1 RO.
<0.05	Detection limit greater than RO due to dilution

TABLE 3-15
TIER 1 COMPARISON - RCRA METALS AND CYANIDE RESULTS FOR 3 TO 10 FT
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remedial Objectives - Soil											B-504	B-508	B-509	UTB-15	UTB-20	UTB-21	UTB-22
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to Groundwater	*MSA*		B-504-7	B-508-9	B-509-8	UTB-15-S01	UTB-20-S01	UTB-21-S01	UTB-22-S01
CONSTITUENT	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**	**(Class I)***	***Background***	**UNITS**	**7/13/2004 6'-7'**	**7/19/2004 8'-9'**	**7/21/2004 7'-8'**	**12/13/1991 9'-11'**	**12/11/1991 7'-8'**	**12/12/1991 3'-8'**	**12/12/1991 6'-8'**
Arsenic	13.0	13.0	61.0	750	1,200	25,000	---	---	30	13	(mg/kg)	<2.31	13	12.7	---	---	---	---
Barium	5,500	140,000	14,000	690,000	910,000	870,000	---	---	1,800	110	(mg/kg)	63.8	126	117	---	---	---	---
Cadmium	78	2,000	200	1,800	2,800	59,000	---	---	59	0.6	(mg/kg)	0.31	<0.19	0.1	---	---	---	---
Chromium	230	6,100	4,100	270	420	690	---	---	28	16.2	(mg/kg)	14.7	21.9	16.8	---	---	---	---
Cyanide[(a)]	1,600	41,000	4,100	---	---	---	---	---	40	0.51	(mg/kg)	---	---	---	0.35	2	5	<0.25
Lead	400	800	700	---	---	---	---	---	107	36	(mg/kg)	16.4	17.9	13.8	---	---	---	---
Mercury	23	610	61	10	16	0.10	0.45	0.45	6.4	0.06	(mg/kg)	0.026	0.036	0.028	---	---	---	---
Selenium	390	10,000	1,000	---	---	---	---	---	3.3	0.48	(mg/kg)	**<3.70**	**<3.85**	**<3.92**	---	---	---	---
Silver	390	10,000	1,000	---	---	---	---	---	39	0.55	(mg/kg)	<0.93	<0.96	<0.98	---	---	---	---

Notes:

mg/kg	Milligrams per kilogram
(a)	Remedial objectives are for amenable cyanide
-----	No remediation objective has been established by the IEPA for this constitiuent for this exposure route
<12	Not detected at the level identified
*	Based on an average pH of 7.50 for the site
	Analytical result exceeds one or more Tier 1 RO.
<0.05	Detection limit greater than RO due to dilution

TABLE 3-15
TIER 1 COMPARISON - RCRA METALS AND CYANIDE RESULTS FOR 3 TO 10 FT
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remedial Objectives - Soil											UTB-23	UTB-24	UTB-25	UTB-26	UTB-27
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to Groundwater	*MSA*		UTB-23-S01	UTB 24-S01	UTB-25-S01	UTB-26-S02	UTB-27-S01
CONSTITUENT	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**	**(Class I)***	***Background***	**UNITS**	**12/14/1991 6'-8'**	**12/15/1991 6'-8'**	**12/14/1991 9'-11'**	**12/15/1991 6'-8'**	**12/16/1991 6'-8'**
Arsenic	13.0	13.0	61.0	750	1,200	25,000	---	---	30	13	(mg/kg)	---	---	---	---	---
Barium	5,500	140,000	14,000	690,000	910,000	870,000	---	---	1,800	110	(mg/kg)	---	---	---	---	---
Cadmium	78	2,000	200	1,800	2,800	59,000	---	---	59	0.6	(mg/kg)	---	---	---	---	---
Chromium	230	6,100	4,100	270	420	690	---	---	28	16.2	(mg/kg)	---	---	---	---	---
Cyanide[(a)]	1,600	41,000	4,100	---	---	---	---	---	40	0.51	(mg/kg)	14	11	1	<0.25	5
Lead	400	800	700	---	---	---	---	---	107	36	(mg/kg)	---	---	---	---	---
Mercury	23	610	61	10	16	0.10	0.45	0.45	6.4	0.06	(mg/kg)	---	---	---	---	---
Selenium	390	10,000	1,000	---	---	---	---	---	3.3	0.48	(mg/kg)	---	---	---	---	---
Silver	390	10,000	1,000	---	---	---	---	---	39	0.55	(mg/kg)	---	---	---	---	---

Notes:

mg/kg	Milligrams per kilogram
(a)	Remedial objectives are for amenable cyanide
-----	No remediation objective has been established by the IEPA for this constitiuent for this exposure route
<12	Not detected at the level identified
*	Based on an average pH of 7.50 for the site
	Analytical result exceeds one or more Tier 1 RO.
<0.05	Detection limit greater than RO due to dilution

TABLE 3-16
TIER 1 COMPARISON - RCRA METALS AND CYANIDE RESULTS FOR GREATER THAN 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remedial Objectives - Soil											B-818	B-822	B-835	B-501	B-502
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to Groundwater	*MSA*		B818 (13.0-15.0')	B822 (13.0-15.0)	B835 (28.0-29.0)	B-501-24	B-502-12
CONSTITUENT	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**	**(Class I)***	***Background***	**UNITS**	**4/1/2008**	**4/1/2008**	**4/3/2008**	**7/13/2004**	**7/13/2004**
												13.0-15.0'	**13.0-15.0**	**28.0-29.0**	**23'-24'**	**11'-12'**
Arsenic	13.0	13.0	61.0	750	1,200	25,000	---	---	30	13	(mg/kg)	9.97	9.99	7.78	3.46	7.47
Barium	5,500	140,000	14,000	690,000	910,000	870,000	---	---	1,800	110	(mg/kg)	---	---	---	14.7	52
Cadmium	78	2,000	200	1,800	2,800	59,000	---	---	59	0.6	(mg/kg)	---	---	---	0.1	0.17
Chromium	230	6,100	4,100	270	420	690	---	---	28	16.2	(mg/kg)	17.3	18.5	12.7	13.6	11.8
Cyanide[(a)]	1,600	41,000	4,100	---	---	---	---	---	40	0.51	(mg/kg)	2.02	0.25	0.59	---	---
Lead	400	800	700	---	---	---	---	---	107	36	(mg/kg)	16.2	12.8	9.62	8.07	12.3
Mercury	23	610	61	10	16	0.10	0.45	0.45	6.4	0.06	(mg/kg)	---	---	---	0.009	0.05
Selenium	390	10,000	1,000	---	---	---	---	---	3.3	0.48	(mg/kg)	---	---	---	**<3.77**	**<3.85**
Silver	390	10,000	1,000	---	---	---	---	---	39	0.55	(mg/kg)	---	---	---	<0.94	<0.96

Notes:		
	mg/kg	Milligrams per kilogram
	(a)	Remedial objectives are for amenable cyanide
	-----	No remediation objective has been established by the IEPA for this constitiuent for this exposure route
	<12	Not detected at the level identified
	*	Based on an average pH of 7.50 for the site.
		Analytical result exceeds one or more Tier 1 RO
	<3.77	Laboratory method detection limit is higher than one or more remedial objective due to dilution

TABLE 3-16
TIER 1 COMPARISON - RCRA METALS AND CYANIDE RESULTS FOR GREATER THAN 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remedial Objectives - Soil											B-505	B-506	B-507	B-513	B-515	B-553
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to Groundwater	*MSA*		B-505-11	B-506-28	B-507-19	B-513-12	B-515-32	B-553-32
CONSTITUENT	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**	**(Class I)***	***Background***	**UNITS**	**7/14/2004 10'-11'**	**7/22/2004 27'-28'**	**7/21/2004 18'-19'**	**7/12/2004 11'-12'**	**7/16/2004 31-'32'**	**7/14/2004 31'-32'**
Arsenic	13.0	13.0	61.0	750	1,200	25,000	---	---	30	13	(mg/kg)	10.1	4.57	<2.36	4.07	7.64	5.46
Barium	5,500	140,000	14,000	690,000	910,000	870,000	---	---	1,800	110	(mg/kg)	77.2	20.1	4.88	33.1	13.3	14.6
Cadmium	78	2,000	200	1,800	2,800	59,000	---	---	59	0.6	(mg/kg)	0.16	<0.20	<0.19	<0.20	0.23	<0.20
Chromium	230	6,100	4,100	270	420	690	---	---	28	16.2	(mg/kg)	22.3	11.5	2.49	18.2	9.04	10.1
Cyanide[(a)]	1,600	41,000	4,100	---	---	---	---	---	40	0.51	(mg/kg)	---	---	---	---	---	---
Lead	400	800	700	---	---	---	---	---	107	36	(mg/kg)	14.9	9.98	3.2	10.9	8.93	8.62
Mercury	23	610	61	10	16	0.10	0.45	0.45	6.4	0.06	(mg/kg)	0.043	0.008	<0.012	0.006	0.007	0.009
Selenium	390	10,000	1,000	---	---	---	---	---	3.3	0.48	(mg/kg)	**<3.85**	**<4.00**	**<3.77**	**<4.00**	**<3.85**	**<4.00**
Silver	390	10,000	1,000	---	---	---	---	---	39	0.55	(mg/kg)	<0.96	<1.00	<0.94	<1.00	<0.96	<1.00

Notes:		
	mg/kg	Milligrams per kilogram
	(a)	Remedial objectives are for amenable cyanide
	-----	No remediation objective has been established by the IEPA for this constitiuent for this exposure route
	<12	Not detected at the level identified
	*	Based on an average pH of 7.50 for the site.
		Analytical result exceeds one or more Tier 1 RO
	<3.77	Laboratory method detection limit is higher than one or more remedial objective due to dilution

TABLE 3-16
TIER 1 COMPARISON - RCRA METALS AND CYANIDE RESULTS FOR GREATER THAN 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remedial Objectives - Soil											B-556	B-557	UTB-15	UTB-20	UTB-21	UTB-22
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to Groundwater	*MSA*		B-556-28	B-557-12	UTB-15-S02	UTB-20-S02	UTB-21-S02	UTB-22-S02
CONSTITUENT	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**	**(Class I)***	***Background***	**UNITS**	**7/20/2004 27'-28'**	**7/20/2004 11'-12'**	**12/13/1991 33'-35'**	**12/11/1991 17'-18'**	**12/12/1991 20'-23'**	**12/12/1991 20'-23'**
Arsenic	13.0	13.0	61.0	750	1,200	25,000	---	---	30	13	(mg/kg)	3.69	12.4	---	---	---	---
Barium	5,500	140,000	14,000	690,000	910,000	870,000	---	---	1,800	110	(mg/kg)	17.2	109	---	---	---	---
Cadmium	78	2,000	200	1,800	2,800	59,000	---	---	59	0.6	(mg/kg)	<0.19	<0.20	---	---	---	---
Chromium	230	6,100	4,100	270	420	690	---	---	28	16.2	(mg/kg)	11.4	23.3	---	---	---	---
Cyanide[(a)]	1,600	41,000	4,100	---	---	---	---	---	40	0.51	(mg/kg)	---	---	<0.25	<0.25	<0.25	<0.25
Lead	400	800	700	---	---	---	---	---	107	36	(mg/kg)	9.94	19.1	---	---	---	---
Mercury	23	610	61	10	16	0.10	0.45	0.45	6.4	0.06	(mg/kg)	0.008	0.009	---	---	---	---
Selenium	390	10,000	1,000	---	---	---	---	---	3.3	0.48	(mg/kg)	**<3.77**	**<4.00**	---	---	---	---
Silver	390	10,000	1,000	---	---	---	---	---	39	0.55	(mg/kg)	<0.94	<1.00	---	---	---	---

Notes:	mg/kg	Milligrams per kilogram
	(a)	Remedial objectives are for amenable cyanide
	-----	No remediation objective has been established by the IEPA for this constitiuent for this exposure route
	<12	Not detected at the level identified
	*	Based on an average pH of 7.50 for the site.
		Analytical result exceeds one or more Tier 1 RO
	<3.77	Laboratory method detection limit is higher than one or more remedial objective due to dilution

TABLE 3-16
TIER 1 COMPARISON - RCRA METALS AND CYANIDE RESULTS FOR GREATER THAN 10 FT DEPTH
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

	Tier 1 Remedial Objectives - Soil											UTB-23	UTB-24	UTB-25	UTB-26
		Ingestion			*Inhalation*		*Indoor Inhalation*		Soil Component to Groundwater	*MSA*		UTB-23-S02	UTB-24-S02	UTB-25-S02	UTB-26-S02
CONSTITUENT	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**	**Construction**	**Residential**	**Commercial**	**(Class I)***	***Background***	**UNITS**	**12/14/1991 26'-28'**	**12/15/1991 21'-23'**	**12/14/1991 26'-28'**	**12/15/1991 21'-23'**
Arsenic	13.0	13.0	61.0	750	1,200	25,000	---	---	30	13	(mg/kg)	---	---	---	---
Barium	5,500	140,000	14,000	690,000	910,000	870,000	---	---	1,800	110	(mg/kg)	---	---	---	---
Cadmium	78	2,000	200	1,800	2,800	59,000	---	---	59	0.6	(mg/kg)	---	---	---	---
Chromium	230	6,100	4,100	270	420	690	---	---	28	16.2	(mg/kg)	---	---	---	---
Cyanide[(a)]	1,600	41,000	4,100	---	---	---	---	---	40	0.51	(mg/kg)	<0.25	<0.25	<0.25	<0.25
Lead	400	800	700	---	---	---	---	---	107	36	(mg/kg)	---	---	---	---
Mercury	23	610	61	10	16	0.10	0.45	0.45	6.4	0.06	(mg/kg)	---	---	---	---
Selenium	390	10,000	1,000	---	---	---	---	---	3.3	0.48	(mg/kg)	---	---	---	---
Silver	390	10,000	1,000	---	---	---	---	---	39	0.55	(mg/kg)	---	---	---	---

Notes:

mg/kg	Milligrams per kilogram
(a)	Remedial objectives are for amenable cyanide
-----	No remediation objective has been established by the IEPA for this constitiuent for this exposure route
<12	Not detected at the level identified
*	Based on an average pH of 7.50 for the site.
	Analytical result exceeds one or more Tier 1 RO
<3.77	Laboratory method detection limit is higher than one or more remedial objective due to dilution

TABLE 3-17
GROUNDWATER ANALYTICAL RESULTS - METALS AND PCBs
CHAMPAIGN MGP SITE
AMERENIP

CONSTITUENT		Class I Groundwater Standard	Units	UMW-102 9/16/2008	UMW-104 9/17/2008	UMW-105 9/16/2008	UMW-106 9/16/2008	UMW-107 9/16/2008	UMW-108 9/17/2008	UMW-109 9/17/2008	UMW-110 9/17/2008	UMW-111A 9/17/2008	UMW-113 9/16/2008	UMW-113 D 9/16/2008	UMW-114 9/16/2008	UMW-115 9/16/2008	UMW-116 9/16/2008	UMW-117 9/17/2008	UMW-118 9/17/2008	UMW-119 9/16/2008	UMW-120 9/16/2008
Metals (6010B)																					
Aluminum		3.5 (1)	mg/L	0.0652	0.0714	0.033	0.143	0.0546	0.111	0.0616	0.0708	0.023	0.0662	0.03	0.026	0.0562	0.05	0.0969	0.801	3.32	1.12
Antimony		0.006	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium		2.0	mg/L	0.376	0.188	0.0477	0.0632	0.21	0.124	0.118	0.0818	0.0373	0.0504	0.0492	0.225	0.0232	0.0931	0.0993	0.0791	0.0627	0.0623
Beryllium		0.004	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001
Cadmium		0.005	mg/L	<0.002	<0.002	0.0003	0.0003	<0.002	<0.002	<0.002	<0.002	0.0003	<0.002	0.0003	0.0004	0.0003	<0.002	<0.002	<0.002	<0.002	0.002
Calcium		---	mg/L	143	121	146	243	95.1	139	202	163	193	247	242	124	375	154	79.2	154	93.8	74
Chromium		0.1	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0069	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0235	<0.01	<0.01	0.0056	<0.01
Cobalt		1.0	mg/L	0.0056	0.0034	<0.01	0.0071	0.0045	<0.01	0.0063	0.0088	<0.01	0.0129	0.0115	0.0064	0.0083	0.0024	<0.01	<0.01	0.0035	<0.01
Copper		0.65	mg/L	<0.01	0.003	<0.01	0.0047	<0.01	<0.01	0.0033	0.0036	0.0036	0.0032	<0.01	<0.01	0.0069	0.0038	0.0042	<0.01	0.0058	0.009
Iron		5.0	mg/L	3.39	0.14	0.0857	0.396	6.41	0.0989	0.204	8.53	0.013	19.6	18.7	8.26	32.6	0.178	0.0655	0.769	3.89	0.898
Magnesium		---	mg/L	26.2	21	64.5	110	61.7	44.3	79.9	23.9	79.8	41.3	40.2	69	52.7	73.7	24.4	28.1	29.1	25.5
Manganese		0.15	mg/L	1.46	1.3	0.008	1.32	0.0526	0.0381	1.35	2.78	<0.005	2.56	2.52	0.242	0.303	0.138	0.148	0.144	0.294	0.0528
Nickel		0.1	mg/L	<0.01	<0.01	<0.01	0.0041	<0.01	<0.01	0.698	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.408	0.0041	<0.01	0.0043	<0.01
Potassium		---	mg/L	4.95	3.59	2.37	6.7	10.3	1.72	3.51	2.91	3.48	4.44	4.38	4.37	6.44	1.88	5.99	2.48	4.76	2.88
Silver		0.05	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0032	<0.01	<0.01	0.0037	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium		---	mg/L	26.8	25.4	30.7	258	24.4	28.1	61.7	7.61	85.6	13.3	13.1	20.1	10.3	216	29.9	13.9	19.5	9.75
Vanadium		0.049	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0049	<0.01
Zinc		5.0	mg/L	<0.01	0.0136	0.004	0.0092	<0.01	0.008	0.0043	0.0107	0.0026	0.0103	0.0093	0.0023	0.0053	0.0038	0.0027	0.0063	0.0125	0.013
Mercury 7470A		0.002	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Metals (3020A)																					
Arsenic	7060A	0.05	mg/L	0.0111	0.0017	<0.003	<0.003	0.0076	<0.003	<0.003	0.0133	<0.003	0.0169	0.0157	0.0251	0.0224	<0.003	0.0014	<0.003	0.0017	<0.003
Lead	7421	0.0075	mg/L	<0.002	0.0005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0005	0.0024	0.0023
Selenium	7740	0.05	mg/L	<0.006	<0.006	<0.006	<0.006	<0.006	0.0038	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Thallium	7841	0.002	mg/L	<0.002	<0.002	<0.002	0.0006	<0.002	<0.002	0.0008	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cyanide (9012A)		0.2	mg/L	<0.007	0.209	0.126	0.304	0.889	0.046	0.006	1.01	<0.007	1.08	1.08	2.68	3.19	0.009	0.006	0.046	0.024	0.011
Polychlorinated Biphenyls (PBCs) 8082																					
Aroclor 1016		---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Aroclor 1221		---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Aroclor 1232		---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Aroclor 1242		---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Aroclor 1248		---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Aroclor 1254		---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Aroclor 1260		---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

Notes:

ug/L Micrograms per liter
(1) Non-TACO or provisional RO provided by the IEPA
<5 Not detected at the method detection limit identified
Constituent exceeds Class I Groundwater Standard

TABLE 3-17
GROUNDWATER ANALYTICAL RESULTS - METALS AND PCBs
CHAMPAIGN MGP SITE
AMERENIP

CONSTITUENT		Class I Groundwater Standard	Units	UMW-121 9/16/2008	UMW-300 9/18/2008	UMW-301 9/17/2008	UMW-302 9/16/2008	UMW-303 9/17/2008	UMW-303 D 9/17/2008	UMW-304 9/16/2008	UMW-305 9/16/2008	UMW-306 9/16/2008	UMW-307 9/16/2008
Metals (6010B)													
Aluminum		3.5 (1)	mg/L	0.514	0.467	0.0748	0.0644	0.205	0.194	0.0625	0.717	0.045	0.134
Antimony		0.006	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium		2.0	mg/L	0.098	0.0796	0.082	0.0505	0.035	0.0374	0.0966	0.0711	0.0667	0.0971
Beryllium		0.004	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cadmium		0.005	mg/L	0.0005	0.0003	<0.002	<0.002	<0.002	0.0003	<0.002	<0.002	<0.002	<0.002
Calcium		---	mg/L	114	154	139	145	150	155	166	129	67.1	145
Chromium		0.1	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt		1.0	mg/L	0.0032	0.0037	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Copper		0.65	mg/L	0.0034	0.003	<0.01	<0.01	<0.01	<0.01	<0.01	0.0031	<0.01	<0.01
Iron		5.0	mg/L	0.822	0.482	0.869	2.41	1.13	1.18	0.139	1.23	2.4	2.26
Magnesium		---	mg/L	29.5	57.8	54.5	69.3	52.2	53.7	58.9	46.9	64	57.7
Manganese		0.15	mg/L	0.432	0.164	0.142	0.0422	0.0787	0.0822	0.0415	0.0877	0.0163	0.0201
Nickel		0.1	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Potassium		---	mg/L	4.12	3.7	2.5	2.19	2.76	2.83	2.11	10.1	56.3	5.78
Silver		0.05	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0032	<0.01	<0.01	<0.01
Sodium		---	mg/L	33.5	31.6	27.1	24.9	32.6	30.9	24.2	39.5	34.8	32.9
Vanadium		0.049	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zinc		5.0	mg/L	0.0048	0.0075	<0.01	0.0096	0.0036	0.0062	<0.01	0.0032	<0.01	0.0024
Mercury 7470A		0.002	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Metals (3020A)													
Arsenic	7060A	0.05	mg/L	0.0011	0.0007	<0.003	<0.003	0.0062	0.0067	<0.003	0.0076	0.0025	0.0022
Lead	7421	0.0075	mg/L	0.0004	<0.002	<0.002	<0.002	<0.002	0.0006	<0.002	<0.002	<0.002	<0.002
Selenium	7740	0.05	mg/L	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Thallium	7841	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cyanide (9012A)		0.2	mg/L	0.438	<0.007	0.007	0.119	<0.007	<0.007	0.038	0.01	0.019	0.007
Polychlorinated Biphenyls (PBCs) 8082													
Aroclor 1016		---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Aroclor 1221		---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Aroclor 1232		---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Aroclor 1242		---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Aroclor 1248		---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Aroclor 1254		---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Aroclor 1260		---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

Notes:

ug/L	Micrograms per liter
(1)	Non-TACO or provisional RO provided by the IEPA
<5	Not detected at the method detection limit identified
	Constituent exceeds Class I Groundwater Standard

TABLE 3-18
GROUNDWATER ANALYTICAL RESULTS - PESTICIDES
CHAMPAIGN MGP
AMERENIP

CONSTITUENT	Class I Groundwater Standard	Units	UMW-102 9/16/2008	UMW-104 9/17/2008	UMW-105 9/16/2008	UMW-106 9/16/2008	UMW-107 9/16/2008	UMW-108 9/17/2008	UMW-109 9/17/2008	UMW-110 9/17/2008	UMW-111A 9/17/2008	UMW-113 9/16/2008	UMW-113 D 9/16/2008	UMW-114 9/16/2008	UMW-115 9/16/2008	UMW-116 9/16/2008	UMW-117 9/17/2008	UMW-118 9/17/2008	UMW-119 9/16/2008
Chlorinated Pesticides (8081A)																			
4,4´-DDD	0.014	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.05	<0.05	<0.05
4,4´-DDE	0.01	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.14	<0.05	<0.05	<0.05	<0.05
4,4´-DDT	0.006	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	0.014	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-BHC	0.00011	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Chlordane	---	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
beta-BHC	---	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	0.13	<0.05	<0.05	<0.05	<0.05
delta-BHC	---	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	0.009	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.05	<0.05	0.04
Endosulfan I	0.042	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan II	---	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	---	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	0.002	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	---	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin ketone	---	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	---	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	0.0004	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	0.0002	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	0.04	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05
Toxaphene	0.003	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Notes:

ug/L	Micrograms per liter
(1)	Non-TACO or provisional RO provided by the IEPA
<5	Not detected at the method limit identified
	Constituent exceeds Class I Groundwater Standard

TABLE 3-18
GROUNDWATER ANALYTICAL RESULTS - PESTICIDES
CHAMPAIGN MGP
AMERENIP

CONSTITUENT	Class I Groundwater Standard	Units	UMW-120 9/16/2008	UMW-121 9/16/2008	UMW-300 9/18/2008	UMW-301 9/17/2008	UMW-302 9/16/2008	UMW-303 9/17/2008	UMW-303 D 9/17/2008	UMW-304 9/16/2008	UMW-305 9/16/2008	UMW-306 9/16/2008	UMW-307 9/16/2008
Chlorinated Pesticides (8081A)													
4,4´-DDD	0.014	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
4,4´-DDE	0.01	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
4,4´-DDT	0.006	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	0.014	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-BHC	0.00011	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Chlordane	---	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
beta-BHC	---	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	---	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	0.009	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan I	0.042	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan II	---	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	---	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	0.002	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	---	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin ketone	---	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	---	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	0.0004	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	0.0002	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	0.04	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Toxaphene	0.003	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Notes:

ug/L	Micrograms per liter
(1)	Non-TACO or provisional RO provided by the IEPA
<5	Not detected at the method limit identified
	Constituent exceeds Class I Groundwater Standard

TABLE 3-19
EVALUATION FOR SOIL SATURATION LIMITS
CONSTITUENTS WITH MELTING POINTS LESS THAN 30 C
CHAMPAIGN FORMER MGP SITE
AMERENIP
CHAMPAIGN, ILLINOIS

Constituent	Soil Saturation Limit	Units	B-506 7/22/2004 16.0-17.0	B-507 7/21/2004 18.0-19.0	B-514 7/22/2004 16.0-17.0
Ethylbenzene	400[(1)]	mg/kg	122	141	797
Toluene	650[(1)]	mg/kg	676	1540	266
Xylenes	320[(1)]	mg/kg	549	1300	721

Notes:

[(1)]	Soil saturation limits from IAC 742, Appendix A, Table A
mg/kg	Milligrams per kilogram.
797	Detected concentration exceeds the soil saturation limit for that constituent.

TABLE 3-20
TOC SAMPLE SUMMARY
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

Location	Depth (Feet)	Soil Type	TOC (mg/kg) [1]	Adjusted TOC (mg/kg) [2]
CHPH 200-01	1	fill	16,900	9,802
CHPH 201-01	1	fill	23,100	13,398
CHPH 202-01	1	fill (coal)	276,000	160,080
CHPH 203-01	1	fill (coal)	111,000	64,380
CHPH 200-02	5	Silty CLAY	2,230	1293.4
CHPH 201-02	9	CLAY	3,230	1873.4
CHPH 202-02	10	CLAY	1,650	957
CHPH 203-02	10	Silty CLAY	11,500	6,670
CHPH 200-03	14	Sandy CLAY	13,600	7,888
CHPH 201-03	15	CLAY	7,380	4,280.4
CHPH 202-03	15	CLAY	2,570	1,490.6
CHPH 203-03	15	Silty CLAY	3,010	1,745.8

Notes:
mg/kg - milligrams per kilogram
(1) - Total Organic Carbon by Method 415.1
(2) - Reported value multiplied by 0.58 as per IAC Section 742.215(b)(1)(B)

TABLE 3-21
SOIL ATTENUATION SOURCE EVALUATION
CHAMPAIGN MGP SITE
CHAMPAIGN, ILLINOIS
AMERENIP

Location	Depth (Feet)	TPH (mg/kg)	TOC[(1)]	TOC
B-504-3	2-3	19,920	12.16	6000[(2)]
TP-503-3	3	24,730	2,063.43	6000[(2)]
TP-504-3	3	6,690	541.57	6000[(2)]
TP-507-3.5	3.5	12,510	1,001.65	2,000[(2)]
TP-508-4	4	28,610	3,011.84	2,000[(2)]
B-516-5	4-5	5,410	145.95	2,000[(2)]
B-505-6	5-6	31,110	6,106.50	2,000[(2)]
B-553-6	5-6	---	3,360.16	2,000[(2)]
B-504-7	6-7	---	7,371.70	2,000[(2)]
B-515-7	6-7	---	2,233.98	2,000[(2)]
TP-501-7	7	2,185	201.04	2,000[(2)]
B-506-17	16-17	12,900	6,157.14	2,000[(2)]
B-514-17	16-17	60,700	18,488.50	2,000[(2)]
B-554-18	17-18	6,670	3,225.12	2,000[(2)]
B-507-19	18-19	23,200	16,493.90	2,000[(2)]
B-504-21	20-21	11,040	1,700.42	2,000[(2)]
B-553-24	23-24	49,310	5,065.50	2,000[(2)]

Notes:
TPH - Total petroleum hydrocarbons
mg/kg - milligrams per kilogram
[(1)] Sum of BTEX (8260B), PAHs (8270SIMS), VOCs (8260B) and SVOCs (8270C)
--- Analysis not performed on this sample.
[(2)] - Default value from IAC 742.215(b)(1)(A)

TABLE 7-1
PROJECT REMEDIATION OBJECTIVES
FOR CONSTITUENTS OF CONCERN
CHAMPAIGN MGP
AMERENIP

	Tier 1 Remediation Objective									
	Ingestion			***Inhalation***			***Indoor Inhalation***		**IEPA Accepted Background Levels**	**Project Remediation**
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	**MSA**	**Objective**
Volatile Organic Compounds (mg/kg)										
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
Semivolatile Organic Compounds (mg/kg)										
Acenaphthene	4,700	120,000	120,000	---	---	---	---	---	0.13	4,700
Acenaphthylene	2,300 (1)	61,000 (1)	61,000 (1)	---	---	---	---	---	0.07	2,300
Benzo(a)anthracene	0.9	8	170	---	---	---	---	---	1.8	1.80
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 (1)	8,200 (1)	820 (1)	---	---	---	---	---	---	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 (1)	61000 (1)	61000 (1)	---	---	---	---	---	2.5	2,300
2-methylnaphthalene	2,300	61,000	61,000	---	---	---	83	83	0.14	83
Metals (mg/kg)										
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
Inorganics (mg/kg)										
Cyanide	1,600	41,000	4,100	---	---	---	---	---	0.51	1,600

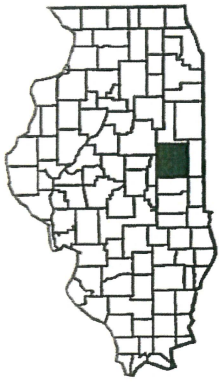
Notes:
(1) Non-TACO or provisional RO provided by the IEPA
--- No remediation objective has been established by the IEPA for this constituent for exposure route
mg/kg Milligrams per kilogram

TABLE 7-1
PROJECT REMEDIATION OBJECTIVES
FOR CONSTITUENTS OF CONCERN
CHAMPAIGN MGP
AMERENIP

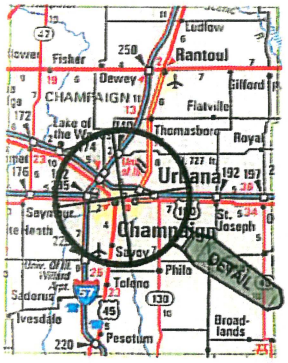
	Tier 1 Remediation Objective									
	Ingestion			***Inhalation***			***Indoor Inhalation***		**IEPA Accepted Background Levels**	**Project Remediation**
	Residential	Commercial	Construction	Residential	Commercial	Construction	Residential	Commercial	**MSA**	**Objective**
Volatile Organic Compounds (mg/kg)										
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
Semivolatile Organic Compounds (mg/kg)										
Acenaphthene	4,700	120,000	120,000	---	---	---	---	---	0.13	4,700
Acenaphthylene	2,300 (1)	61,000 (1)	61,000 (1)	---	---	---	---	---	0.07	2,300
Benzo(a)anthracene	0.9	8	170	---	---	---	---	---	1.8	0.90
Benzo(a)pyrene	0.09	0.8	17	---	---	---	---	---	2.1	0.09
Benzo(b)fluoranthene	0.9	8	170	---	---	---	---	---	2.1	0.9
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	0.09
Dibenzofuran	310 (1)	8,200 (1)	820 (1)	---	---	---	---	---	---	310
Fluorene	3,100	82,000	82,000	---	---	---	---	---	0.18	3,100
Indeno(1,2,3-cd)pyrene	0.9	8	170	---	---	---	---	---	1.6	0.9
Naphthalene	1,600	41,000	4,100	170	270	1.8	34	34	0.2	1.8
Phenanthrene	2,300 (1)	61000 (1)	61000 (1)	---	---	---	---	---	2.5	2,300
2-methylnaphthalene	2,300	61,000	61,000	---	---	---	83	83	0.14	83
Metals (mg/kg)										
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
Inorganics (mg/kg)										
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

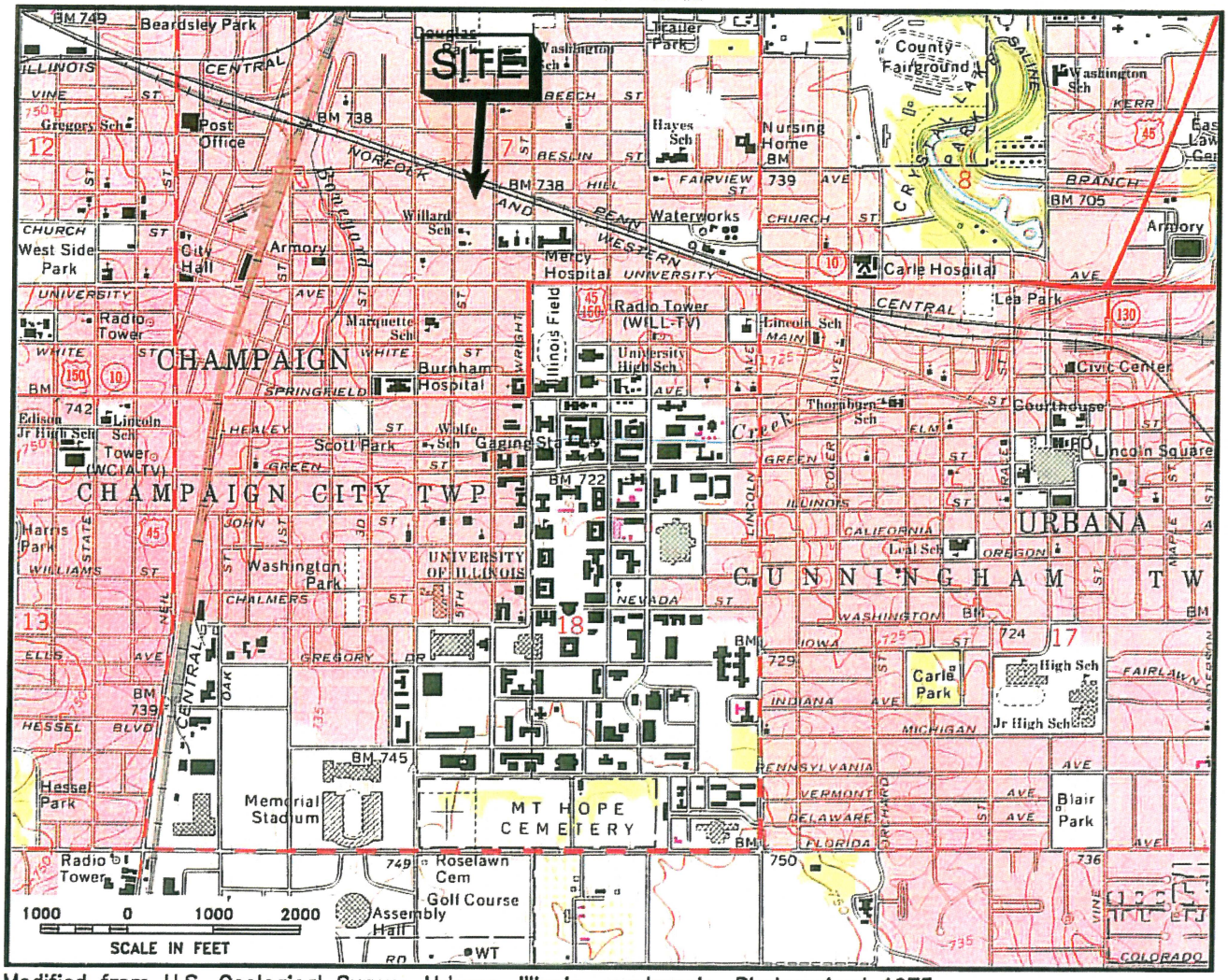
ILLINOIS



CHAMPAIGN COUNTY



AREA IN DETAIL



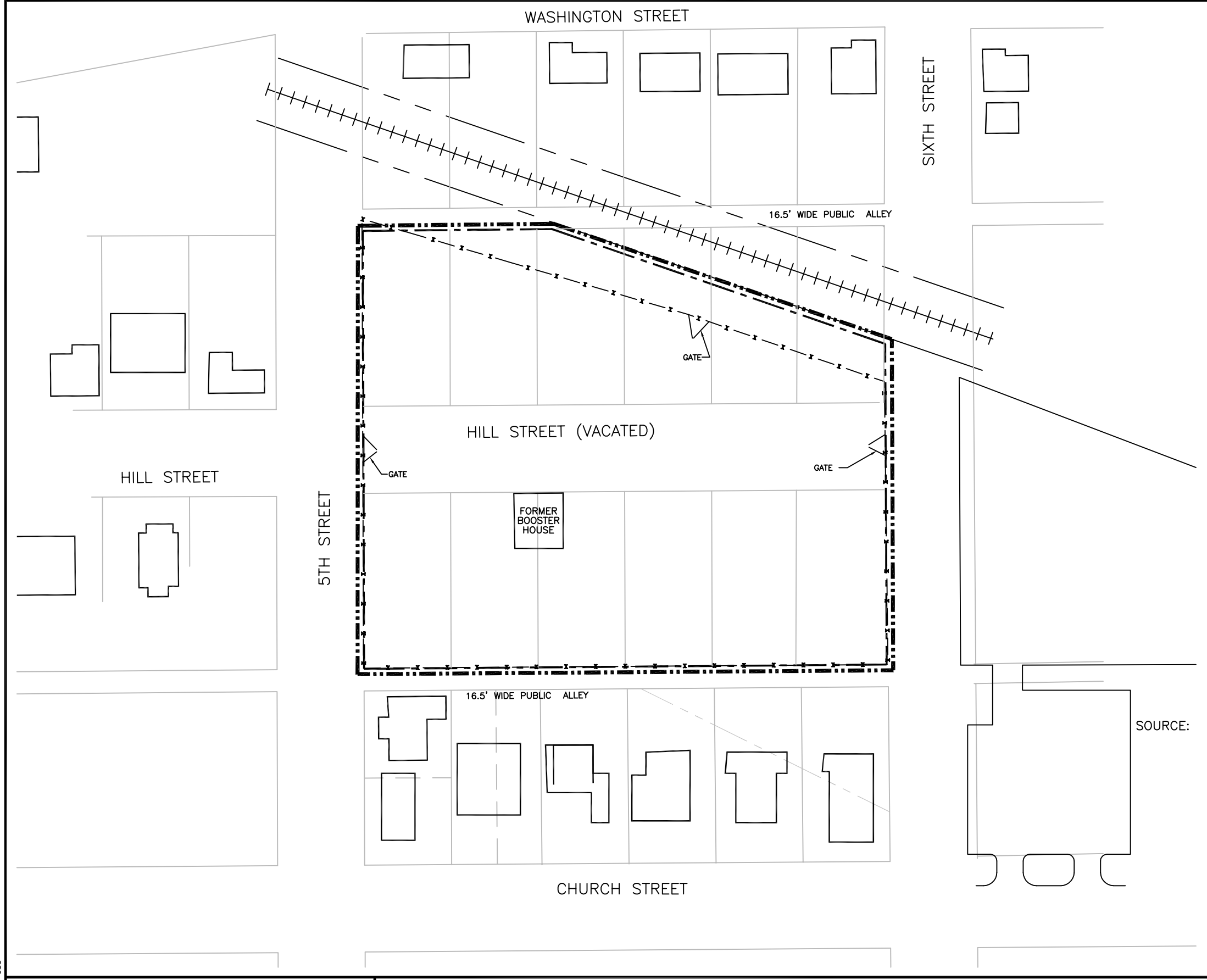
Modified from U.S. Geological Survey, Urbana, Illinois, quadrangle, Photorevised 1975.

SCALE IS VARIABLE

N

PSC	TITLE: SITE LOCATION MAP	DWN: TMM	DES.: SPB	PROJECT NO.: 62403053 AMEREN IP CHAMPAIGN, ILLINOIS
		CHKD:	APPD:	
		DATE: 2/24/00	REV.: 0	FIGURE 1-1

COL 624\00345E-001



LEGEND

- EXISTING STRUCTURES (APPROXIMATE)
- CURRENT AMERENIP PROPERTY BOUNDARY
- REMEDIATION SITE BOUNDARY
- FENCE

SOURCE:

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

0 80
FEET

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COL. J:\624\02647B-033

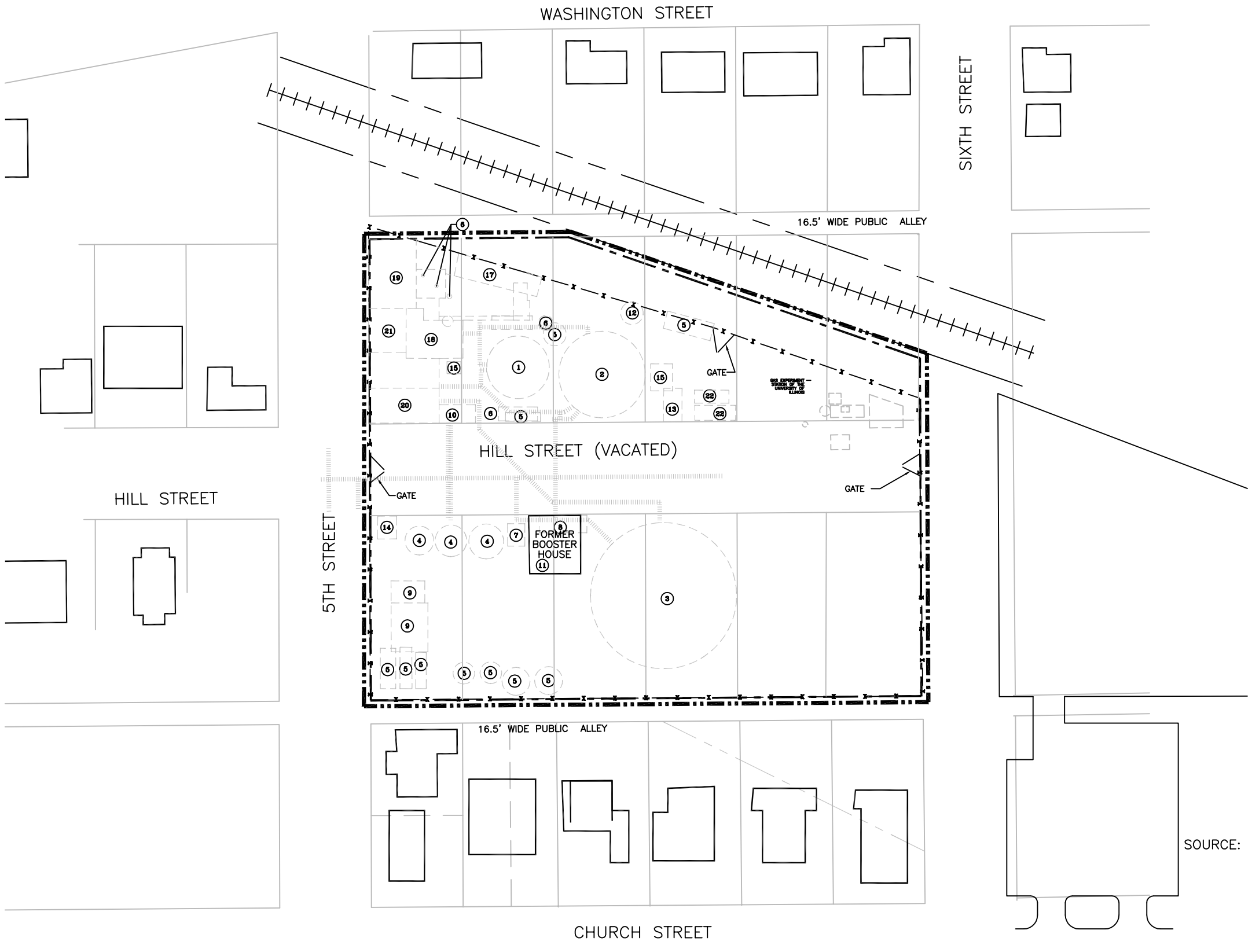
PSC

TITLE:
SITE MAP

DWN:	DES:
TMM	MRC
CHKD:	APPD:
DATE: 2/4/08	REV:

PROJECT NO: 62403053
AMERENIP
CHAMPAIGN, ILLINOIS

FIGURE 1-2



LEGEND

- HISTORICAL MANUFACTURED GAS PLANT STRUCTURES (APPROXIMATE)
- FORMER GAS PLANT PIPING (APPROXIMATE)
- EXISTING STRUCTURES (APPROXIMATE)
- CURRENT AMERENIP PROPERTY BOUNDARY
- REMEDIATION SITE BOUNDARY
- 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.

0 80
FEET

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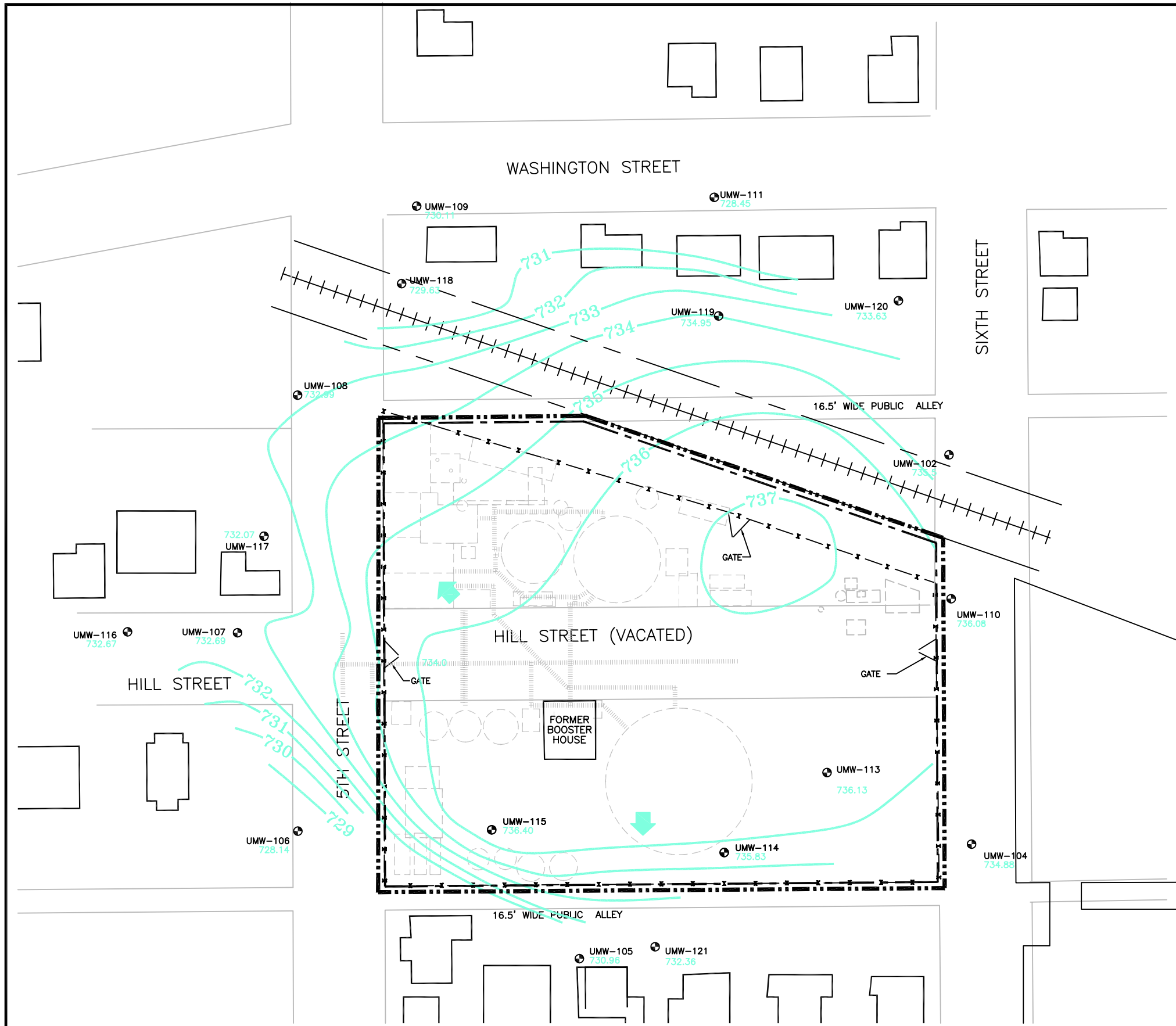
PSC

TITLE:
HISTORICAL MGP STRUCTURES

DWN:	DES:	PROJECT NO: 62403053
TMM	MRC	AMERENIP CHAMPAIGN, ILLINOIS
CHKD:	APPD:	
DATE: 06/26/08	REV:	FIGURE 2–1

COL J:\624\026478-033A



LEGEND

- HISTORICAL MANUFACTURED GAS PLANT STRUCTURES
- FORMER GAS PLANT PIPING
- EXISTING STRUCTURES (APPROXIMATE)
- CURRENT AMERENIP PROPERTY BOUNDARY
- REMEDIATION SITE BOUNDARY
- FENCE
- UMW-113 — SHALLOW GROUNDWATER MONITORING WELLS (APPROXIMATELY 20') COMPLETED IN UPPER GLACIAL TILL
- 734.6 — WATER TABLE ELEVATION (FEET)
- INTERPRETED FLOW DIRECTION

NOTE: THE HISTORICAL MANUFACTURED GAS PLANT STRUCTURES ARE A COMPOSITE FROM SANBORN FIRE INSURANCE MAPS AND HISTORICAL AMERENIP SITE PLANS. THE EXACT LOCATIONS OF THE FEATURES IS 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 VEGRZYN, SARVER AND ASSOCIATES.

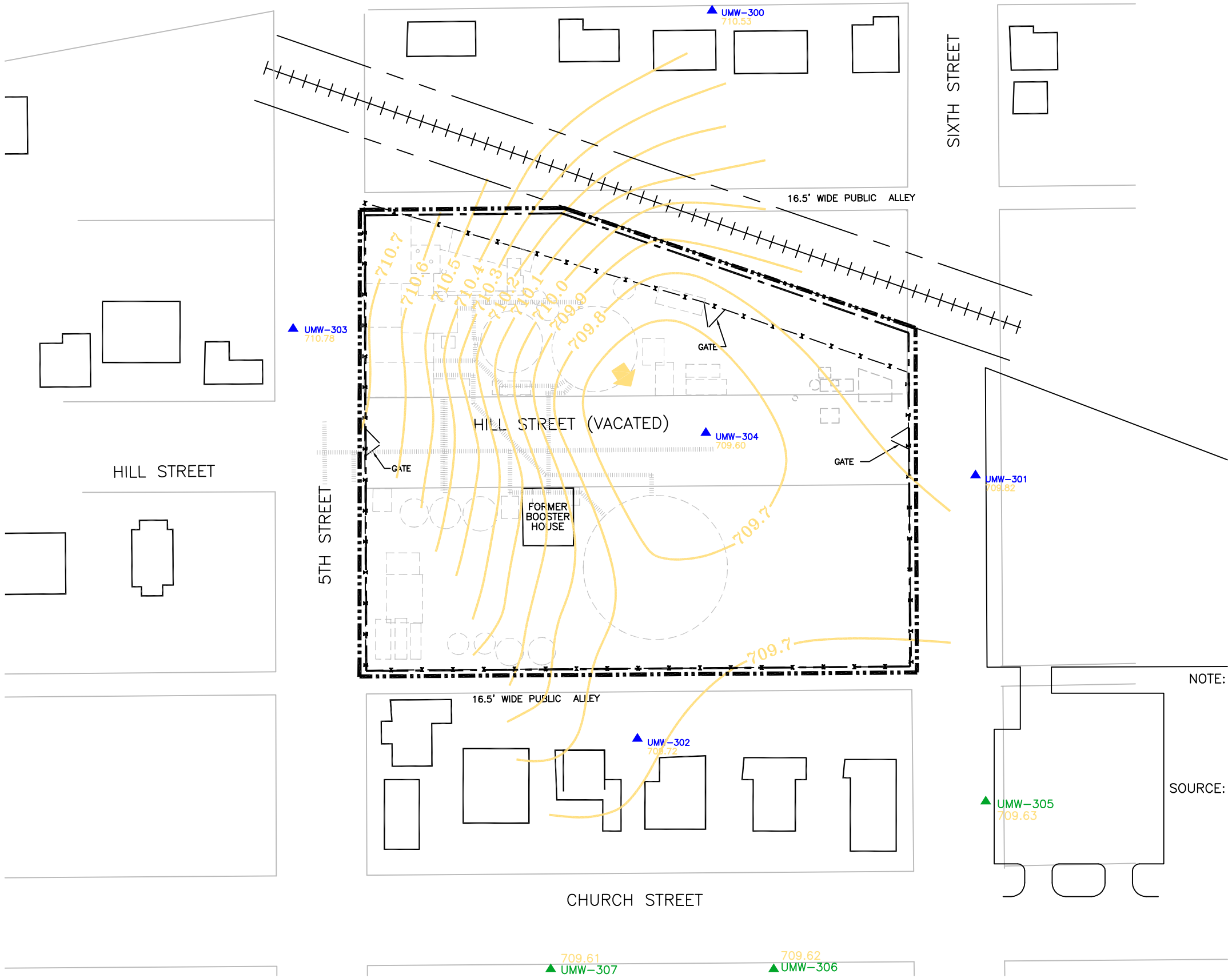
0 80
FEET

COL. 624\02647B-045

PSC

TITLE:
GROUNDWATER ELEVATION CONTOUR
SHALLOW GROUNDWATER SYSTEM
SEPTEMBER 2008

DWN: TMM	DES: MRC	PROJECT NO: 62402647	
CHKD:	APPD:	AMERENIP CHAMPAIGN, ILLINOIS	
DATE: 11/6/08	REV:	FIGURE 2-2	



LEGEND

- HISTORICAL MANUFACTURED GAS PLANT STRUCTURES
- FORMER GAS PLANT PIPING
- EXISTING STRUCTURES (APPROXIMATE)
- CURRENT AMERENIP PROPERTY BOUNDARY
- REMEDIATION SITE BOUNDARY
- FENCE
- ▲ UMW-301 — INTERMEDIATE GROUNDWATER MONITORING WELLS (APPROXIMATELY 45')
- 734.6 — WATER TABLE ELEVATION
- INTERPRETED FLOW DIRECTION

NOTE: THE HISTORICAL MANUFACTURED GAS PLANT STRUCTURES ARE A COMPOSITE FROM SANBORN FIRE INSURANCE MAPS AND HISTORICAL AMERENIP SITE PLANS. THE EXACT LOCATIONS OF THE FEATURES IS 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 VEGRZYN, SARVER AND ASSOCIATES.

0 80
FEET

N

PSC

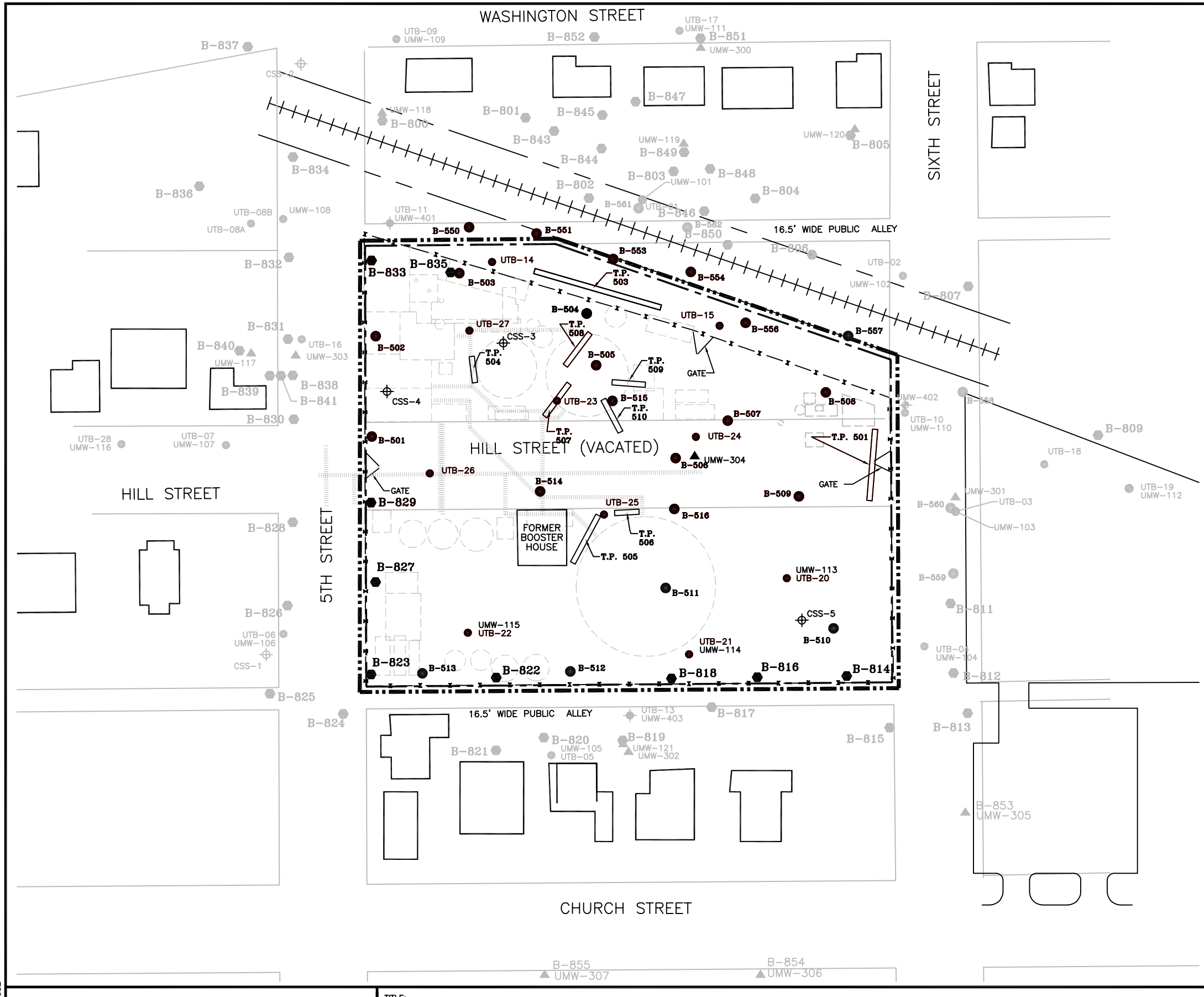
TITLE:
GROUNDWATER ELEVATION CONTOUR
INTERMEDIATE GROUNDWATER SYSTEM
SEPTEMBER 2008

DWN: TMM	DES: MRC
CHKD:	APPD:
DATE: 11/9/08	REV:

PROJECT NO: 62403053
AMERENIP
CHAMPAIGN, ILLINOIS

FIGURE 2-3

COL J:\624\02647B-046



LEGEND

- HISTORICAL MANUFACTURED GAS PLANT STRUCTURES (APPROXIMATE)
- FORMER GAS PLANT PIPING (APPROXIMATE)
- EXISTING STRUCTURES (APPROXIMATE)
- CURRENT AMERENIP PROPERTY BOUNDARY
- REMEDIATION SITE BOUNDARY
- FENCE
- UMW-113 — SHALLOW GROUNDWATER MONITORING WELLS (APPROXIMATELY 20') COMPLETED IN UPPER GLACIAL TILL (ACTIVELY MONITORED)
- UMW-401 — DEEP GROUNDWATER MONITORING WELLS (APPROXIMATELY 150') COMPLETED IN GLASFORD FORMATION
- UMW-401 — WELLS THAT HAVE BEEN ABANDONED
- UMW-300 — INTERMEDIATE GROUNDWATER WELLS (45')
- B-800 — OFF SITE INVESTIGATION BORING LOCATION (2008)
- B-558 — CSI PROBEHOLE LOCATION AND NUMBER (2004)
- T.P. 506 — CSI TEST PIT LOCATION AND NUMBER (2004)
- UTB-19 — TEST BOREHOLE LOCATION (1990–1992)
- CSS-3 — SURFACE SOIL SAMPLE LOCATION
- B-800 — EXEEDANCE OF TIER 1 RO

NOTE: THE HISTORICAL MANUFACTURED GAS PLANT STRUCTURES ARE A COMPOSITE FROM SANBORN FIRE INSURANCE MAPS AND HISTORICAL AMERENIP 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 VEGRZYN, SARVER AND ASSOCIATES.

0 80
FEET

COL 624\02647B-052

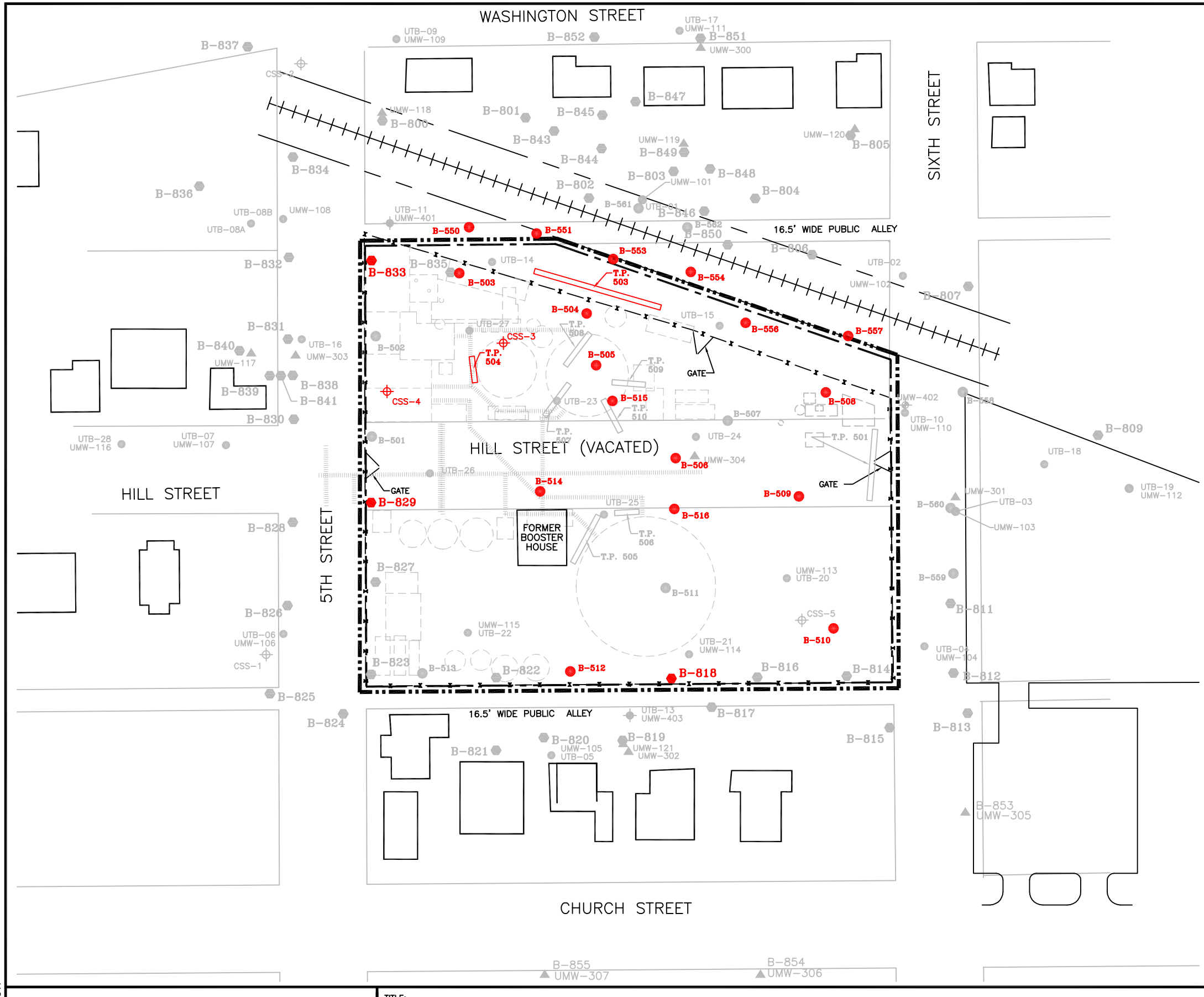
PSC

TITLE:
MONITORING WELL AND BORING LOCATIONS

DWN: TMM	DES: MRC
CHKD:	APPD:
DATE: 10/24/08	REV:

PROJECT NO: 62403053
AMERENIP
CHAMPAIGN, ILLINOIS

FIGURE 3–1



LEGEND

- HISTORICAL MANUFACTURED GAS PLANT STRUCTURES (APPROXIMATE)
- FORMER GAS PLANT PIPING (APPROXIMATE)
- EXISTING STRUCTURES (APPROXIMATE)
- CURRENT AMERENIP PROPERTY BOUNDARY
- REMEDIATION SITE BOUNDARY
- FENCE
- UMW-113 — SHALLOW GROUNDWATER MONITORING WELLS (APPROXIMATELY 20') COMPLETED IN UPPER GLACIAL TILL (ACTIVELY MONITORED)
- UMW-401 — DEEP GROUNDWATER MONITORING WELLS (APPROXIMATELY 150') COMPLETED IN GLASFORD FORMATION
- UMW-401 — WELLS THAT HAVE BEEN ABANDONED
- UMW-300 — INTERMEDIATE GROUNDWATER WELLS (45')
- B-800 — OFF SITE INVESTIGATION BORING LOCATION (2008)
- B-558 — CSI PROBEHOLE LOCATION AND NUMBER (2004)
- T.P. 506 — CSI TEST PIT LOCATION AND NUMBER (2004)
- UTB-19 — TEST BOREHOLE LOCATION (1990–1992)
- CSS-3 — SURFACE SOIL SAMPLE LOCATION
- B-800 — EXEEDANCE OF TIER 1 RO

NOTE: THE HISTORICAL MANUFACTURED GAS PLANT STRUCTURES ARE A COMPOSITE FROM SANBORN FIRE INSURANCE MAPS AND HISTORICAL AMERENIP 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 VEGRZYN, SARVER AND ASSOCIATES.

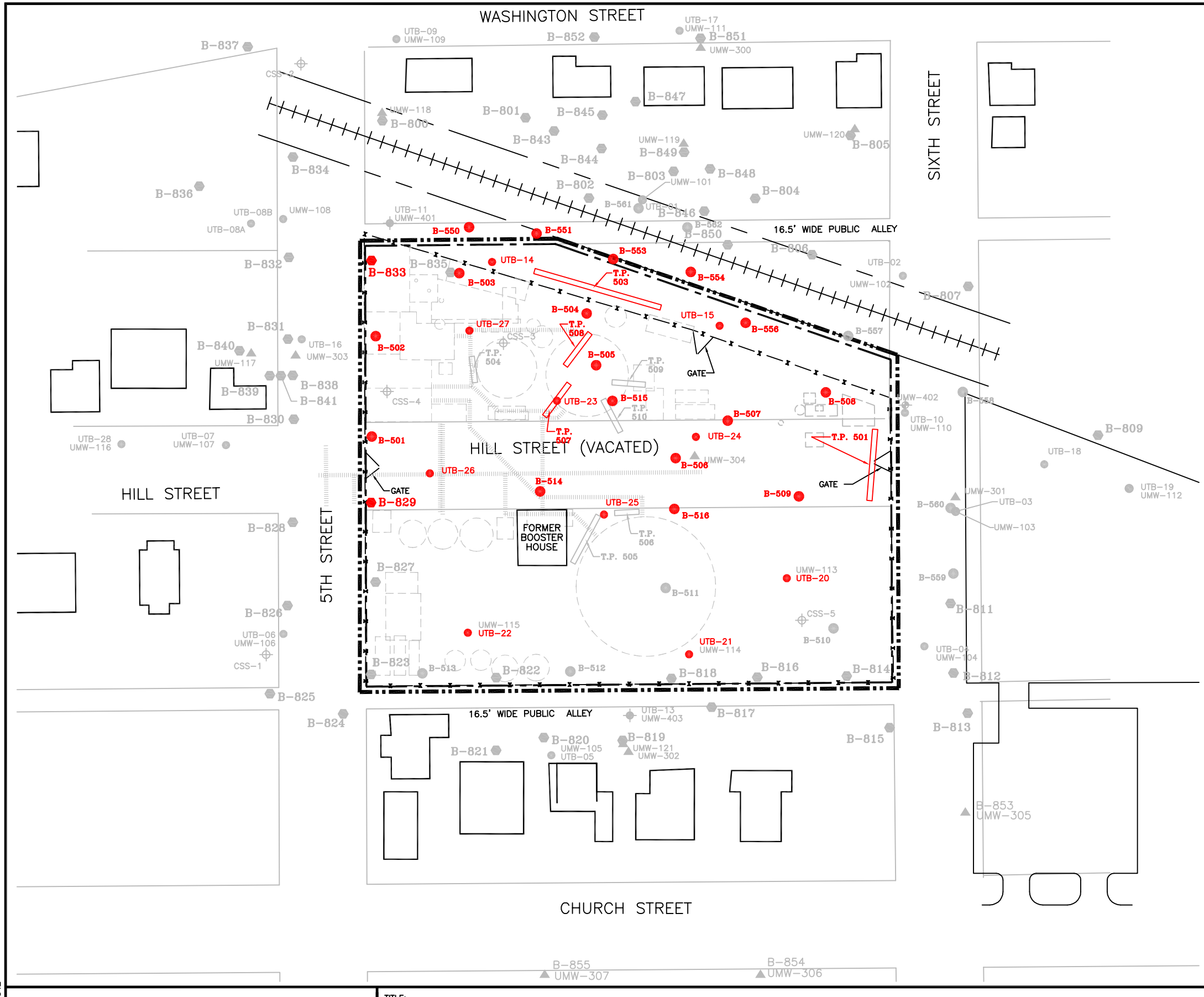
0 80
FEET

COL 624\02647B-041

PSC

TITLE:
EXCEEDANCE OF TIER 1 REMEDIATION OBJECTIVES
FOR SOIL BTEX & PAH CONSTITUENTS
0–3 FOOT DEPTH INTERVAL

DWN:	DES:	PROJECT NO: 62403053
TMM	MRC	AMERENIP CHAMPAIGN, ILLINOIS
CHKD:	APPD:	
DATE: 10/24/08	REV:	FIGURE 3–2



LEGEND

- HISTORICAL MANUFACTURED GAS PLANT STRUCTURES (APPROXIMATE)
- FORMER GAS PLANT PIPING (APPROXIMATE)
- EXISTING STRUCTURES (APPROXIMATE)
- CURRENT AMERENIP PROPERTY BOUNDARY
- REMEDIATION SITE BOUNDARY
- FENCE
- UMW-113 — SHALLOW GROUNDWATER MONITORING WELLS (APPROXIMATELY 20') COMPLETED IN UPPER GLACIAL TILL (ACTIVELY MONITORED)
- UMW-401 — DEEP GROUNDWATER MONITORING WELLS (APPROXIMATELY 150') COMPLETED IN GLASFORD FORMATION
- UMW-401 — WELLS THAT HAVE BEEN ABANDONED
- UMW-300 — INTERMEDIATE GROUNDWATER WELLS (45')
- B-800 — OFF SITE INVESTIGATION BORING LOCATION (2008)
- B-558 — CSI PROBEHOLE LOCATION AND NUMBER (2004)
- T.P. 506 — CSI TEST PIT LOCATION AND NUMBER (2004)
- UTB-19 — TEST BOREHOLE LOCATION (1990–1992)
- CSS-3 — SURFACE SOIL SAMPLE LOCATION
- B-800 — EXEEDANCE OF TIER 1 RO

NOTE: THE HISTORICAL MANUFACTURED GAS PLANT STRUCTURES ARE A COMPOSITE FROM SANBORN FIRE INSURANCE MAPS AND HISTORICAL AMERENIP 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 VEGRZYN, SARVER AND ASSOCIATES.

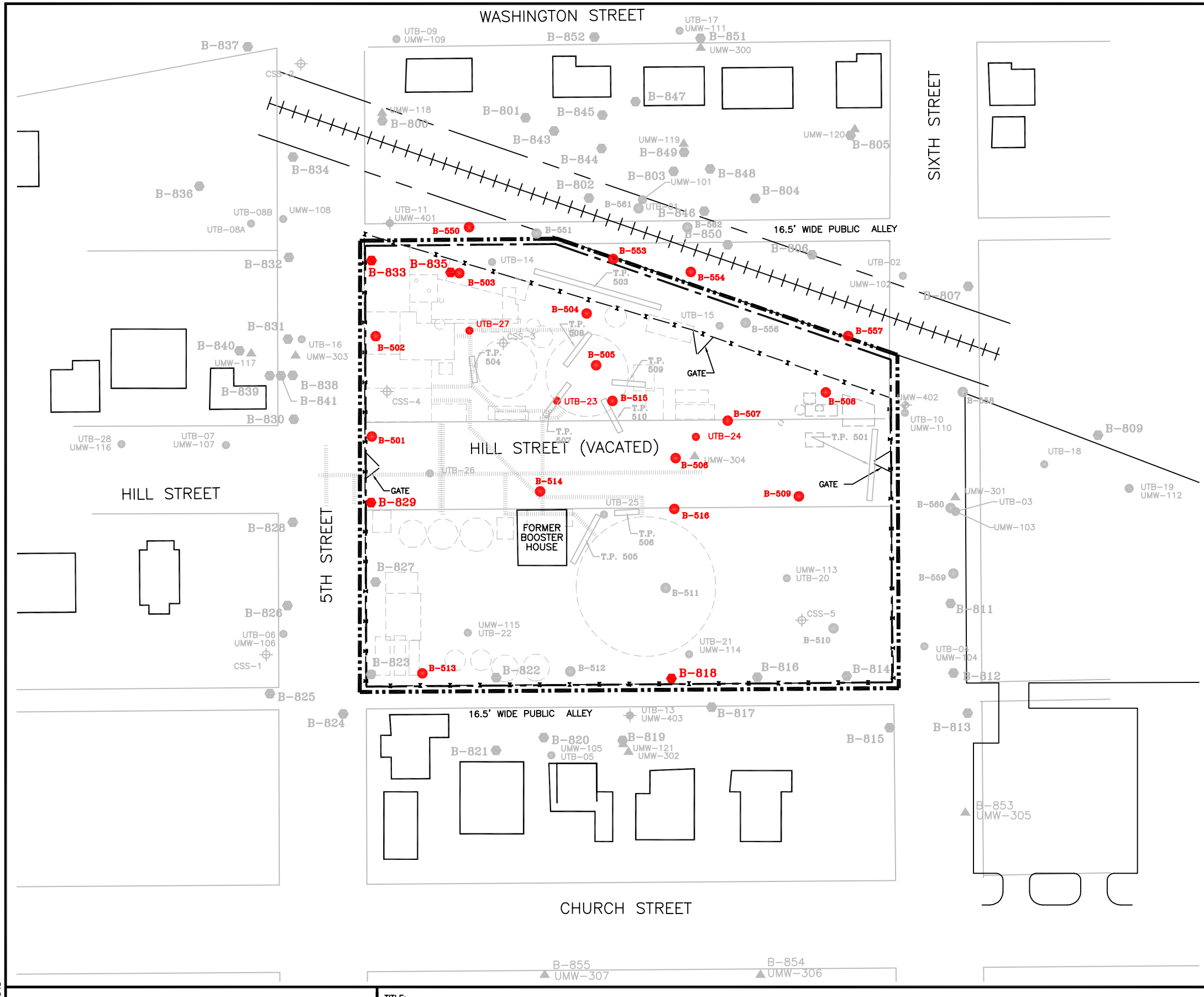
0 80
FEET

COL 624\02647B-042

PSC

TITLE:
EXCEEDANCE OF TIER 1 REMEDIATION OBJECTIVES
FOR SOIL BTEX & PAH CONSTITUENTS
3–10 FOOT DEPTH INTERVAL

DWN:	DES:	PROJECT NO: 62403053
TMM	MRC	AMERENIP CHAMPAIGN, ILLINOIS
CHKD:	APPD:	
DATE: 10/24/08	REV:	FIGURE 3–3



LEGEND

- HISTORICAL MANUFACTURED GAS PLANT STRUCTURES (APPROXIMATE)
- FORMER GAS PLANT PIPING (APPROXIMATE)
- EXISTING STRUCTURES (APPROXIMATE)
- CURRENT AMERENIP PROPERTY BOUNDARY
- REMEDIATION SITE BOUNDARY
- FENCE
- UMW-113 — SHALLOW GROUNDWATER MONITORING WELLS (APPROXIMATELY 20') COMPLETED IN UPPER GLACIAL TILL (ACTIVELY MONITORED)
- UMW-401 — DEEP GROUNDWATER MONITORING WELLS (APPROXIMATELY 150') COMPLETED IN GLASFORD FORMATION
- UMW-401 — WELLS THAT HAVE BEEN ABANDONED
- UMW-300 — INTERMEDIATE GROUNDWATER WELLS (45')
- B-800 — OFF SITE INVESTIGATION BORING LOCATION (2008)
- B-558 — CSI PROBEHOLE LOCATION AND NUMBER (2004)
- T.P. 506 — CSI TEST PIT LOCATION AND NUMBER (2004)
- UTB-19 — TEST BOREHOLE LOCATION (1990–1992)
- CSS-3 — SURFACE SOIL SAMPLE LOCATION
- B-800 — EXEEDANCE OF TIER 1 RO

NOTE: THE HISTORICAL MANUFACTURED GAS PLANT STRUCTURES ARE A COMPOSITE FROM SANBORN FIRE INSURANCE MAPS AND HISTORICAL AMERENIP 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 VEGRZYN, SARVER AND ASSOCIATES.

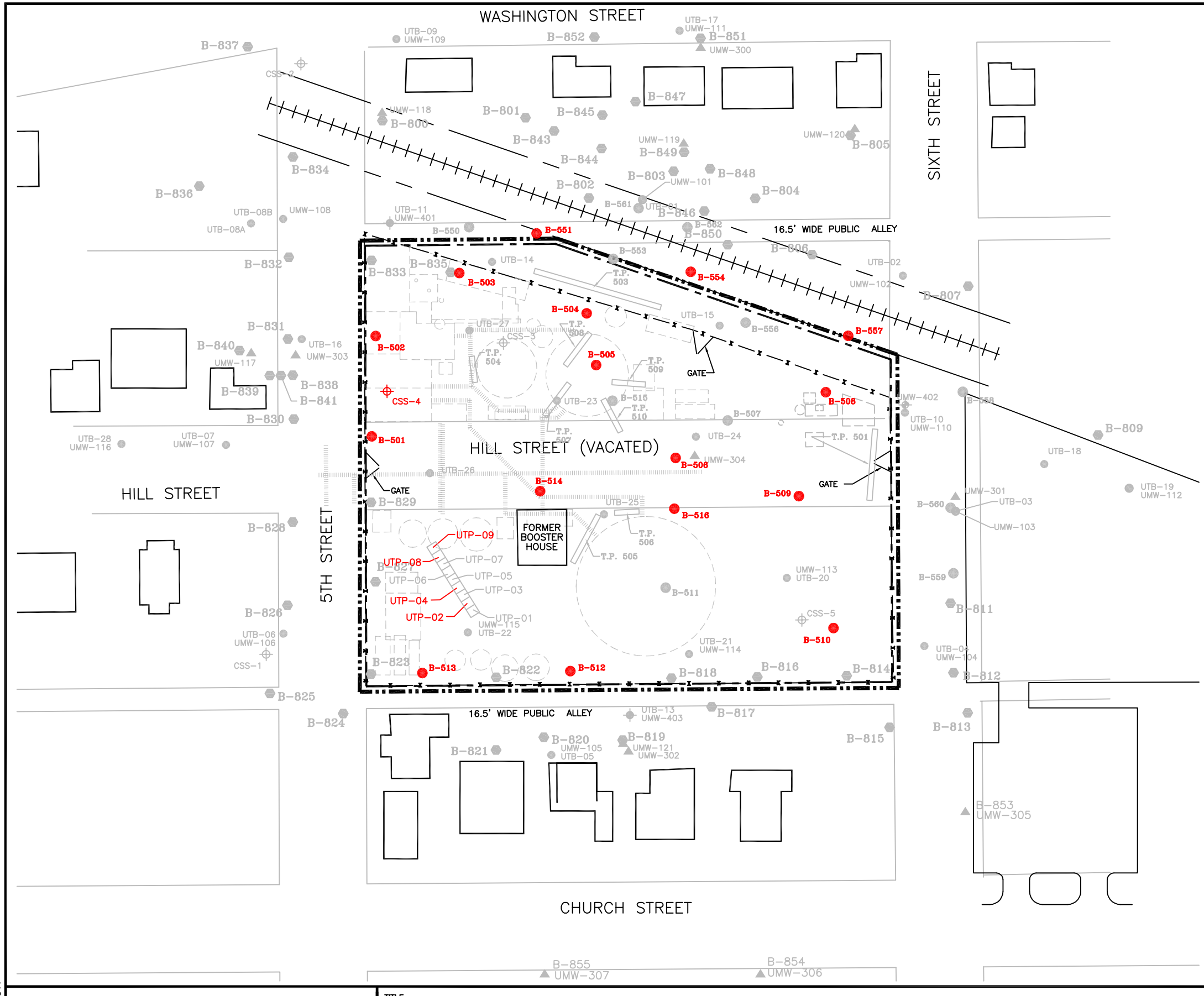
COL 624\02647B-043

PSC

TITLE:

EXCEEDANCE OF TIER 1 REMEDIATION OBJECTIVES FOR SOIL BTEX & PAH CONSTITUENTS GREATER THAN 10 FEET

DWN:	DES:	PROJECT NO: 62403053
TMM	MRC	AMERENIP CHAMPAIGN, ILLINOIS
CHKD:	APPD:	
DATE: 10/24/08	REV:	FIGURE 3–4



LEGEND

- HISTORICAL MANUFACTURED GAS PLANT STRUCTURES (APPROXIMATE)
- FORMER GAS PLANT PIPING (APPROXIMATE)
- EXISTING STRUCTURES (APPROXIMATE)
- CURRENT AMERENIP PROPERTY BOUNDARY
- REMEDIATION SITE BOUNDARY
- FENCE
- UMW-113 — SHALLOW GROUNDWATER MONITORING WELLS (APPROXIMATELY 20') COMPLETED IN UPPER GLACIAL TILL (ACTIVELY MONITORED)
- UMW-401 — DEEP GROUNDWATER MONITORING WELLS (APPROXIMATELY 150') COMPLETED IN GLASFORD FORMATION
- UMW-401 — WELLS THAT HAVE BEEN ABANDONED
- UMW-300 — INTERMEDIATE GROUNDWATER WELLS (45')
- B-800 — OFF SITE INVESTIGATION BORING LOCATION (2008)
- B-558 — CSI PROBEHOLE LOCATION AND NUMBER (2004)
- T.P. 506 — CSI TEST PIT LOCATION AND NUMBER (2004)
- UTB-19 — TEST BOREHOLE LOCATION (1990–1992)
- CSS-3 — SURFACE SOIL SAMPLE LOCATION
- B-800 — EXEEDANCE OF TIER 1 RO

NOTE: THE HISTORICAL MANUFACTURED GAS PLANT STRUCTURES ARE A COMPOSITE FROM SANBORN FIRE INSURANCE MAPS AND HISTORICAL AMERENIP 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 VEGRZYN, SARVER AND ASSOCIATES.

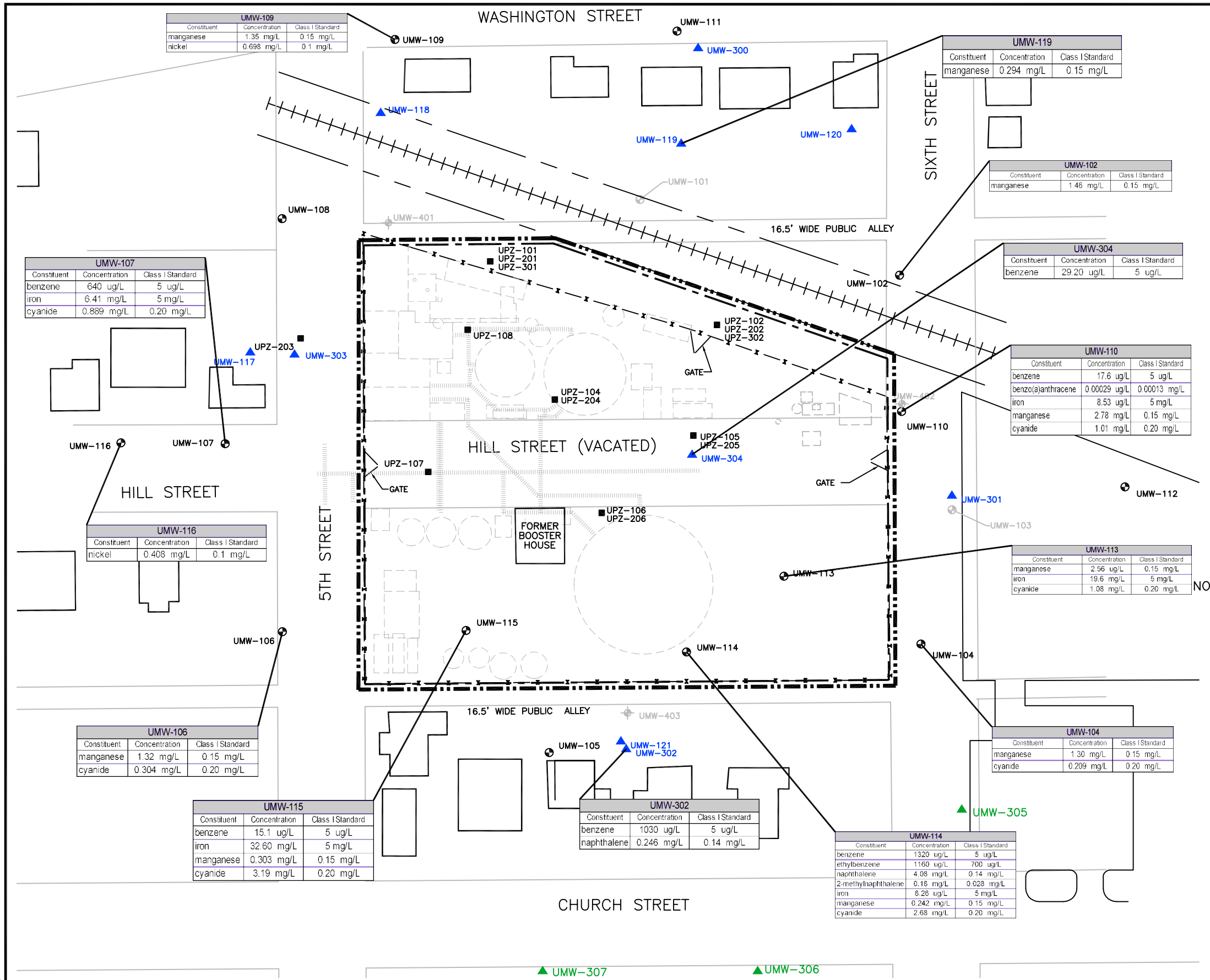
0 80
FEET

COL 624\02647B-044

PSC

TITLE:
EXCEEDANCE OF TIER 1 REMEDIATION OBJECTIVES
FOR METALS AND CYANIDE
0–3 FOOT DEPTH INTERVAL

DWN:	DES:	PROJECT NO: 62403053
TMM	MRC	AMERENIP
CHKD:	APPD:	CHAMPAIGN, ILLINOIS
DATE: 10/24/08	REV:	FIGURE 3–5



UMW-109		
Constituent	Concentration	Class I Standard
manganese	1.35 mg/L	0.15 mg/L
nickel	0.698 mg/L	0.1 mg/L

UMW-119		
Constituent	Concentration	Class I Standard
manganese	0.294 mg/L	0.15 mg/L

UMW-102		
Constituent	Concentration	Class I Standard
manganese	1.46 mg/L	0.15 mg/L

UMW-304		
Constituent	Concentration	Class I Standard
benzene	29.20 ug/L	5 ug/L

UMW-107		
Constituent	Concentration	Class I Standard
benzene	640 ug/L	5 ug/L
iron	6.41 mg/L	5 mg/L
cyanide	0.889 mg/L	0.20 mg/L

UMW-110		
Constituent	Concentration	Class I Standard
benzene	17.6 ug/L	5 ug/L
benzo(a)anthracene	0.00029 ug/L	0.00013 mg/L
iron	8.53 ug/L	5 mg/L
manganese	2.78 mg/L	0.15 mg/L
cyanide	1.01 mg/L	0.20 mg/L

UMW-116		
Constituent	Concentration	Class I Standard
nickel	0.408 mg/L	0.1 mg/L

UMW-113		
Constituent	Concentration	Class I Standard
manganese	2.56 ug/L	0.15 mg/L
iron	19.6 mg/L	5 mg/L
cyanide	1.08 mg/L	0.20 mg/L

UMW-106		
Constituent	Concentration	Class I Standard
manganese	1.32 mg/L	0.15 mg/L
cyanide	0.304 mg/L	0.20 mg/L

UMW-115		
Constituent	Concentration	Class I Standard
benzene	15.1 ug/L	5 ug/L
iron	32.60 mg/L	5 mg/L
manganese	0.303 mg/L	0.15 mg/L
cyanide	3.19 mg/L	0.20 mg/L

UMW-302		
Constituent	Concentration	Class I Standard
benzene	1030 ug/L	5 ug/L
naphthalene	0.246 mg/L	0.14 mg/L

UMW-104		
Constituent	Concentration	Class I Standard
manganese	1.30 mg/L	0.15 mg/L
cyanide	0.209 mg/L	0.20 mg/L

UMW-114		
Constituent	Concentration	Class I Standard
benzene	1320 ug/L	5 ug/L
ethylbenzene	1160 ug/L	700 ug/L
naphthalene	4.08 mg/L	0.14 mg/L
2-methylnaphthalene	0.18 mg/L	0.028 mg/L
iron	8.26 ug/L	5 mg/L
manganese	0.242 mg/L	0.15 mg/L
cyanide	2.68 mg/L	0.20 mg/L

LEGEND

- HISTORICAL MANUFACTURED GAS PLANT STRUCTURES (APPROXIMATE)
- FORMER GAS PLANT PIPING (APPROXIMATE)
- EXISTING STRUCTURES (APPROXIMATE)
- CURRENT AMERENIP PROPERTY BOUNDARY
- REMEDIATION SITE BOUNDARY
- FENCE
- UPZ-102 / UPZ-202 / UPZ-302 — NESTED PIEZOMETERS (SHALLOW 5' TO 10', MEDIUM 20' TO 25', AND DEEP 30' TO 35') COMPLETED IN GLACIAL TILL
- UMW-113 — SHALLOW GROUNDWATER MONITORING WELLS (APPROXIMATELY 20') COMPLETED IN UPPER GLACIAL TILL (ACTIVELY MONITORED)
- UMW-401 — DEEP GROUNDWATER MONITORING WELLS (APPROXIMATELY 150') COMPLETED IN GLASFORD FORMATION
- UMW-401 — WELLS THAT HAVE BEEN ABANDONED
- UMW-118 — NEW WELL LOCATIONS (ACTIVELY MONITORED)

NOTE:

THE HISTORICAL MANUFACTURED GAS PLANT STRUCTURES ARE A COMPOSITE FROM SANBORN FIRE INSURANCE MAPS AND HISTORICAL AMERENIP 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 VEGRZYN, SARVER AND ASSOCIATES.

0 80
FEET

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PSC

TITLE:
EXCEEDANCE OF CLASS I GROUNDWATER STANDARDS
SEPTEMBER 2008

DWN:	DES:	PROJECT NO: 62403053
TMM	MRC	AMERENIP CHAMPAIGN, ILLINOIS
CHKD:	APPD:	
DATE: 11/17/08	REV:	FIGURE 4-1

COL 624\026478-051