

TABLE 5-11
Groundwater Analytical Data - BTEX, PAHs, Metals, Cyanide
May 2008

Former MGP Site
Champaign, Illinois
AmerenIP

| CONSTITUENT | Class 1 | Units | UMW-102 | UMW-104 | UMW-105 | UMW-106 | UMW-107 | UMW-108 | UMW-109 | UMW-110 | UMW-111A | UMW-113 | UMW-114 | UMW-115 | UMW-116 | UMW-117 |
|---|----------------------|-------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Groundwater Standard | | 5/22/2008 | 5/22/2008 | 5/21/2008 | 5/21/2008 | 5/20/2008 | 5/20/2008 | 5/22/2008 | 5/21/2008 | 5/22/2008 | 5/20/2008 | 5/20/2008 | 5/20/2008 | 5/20/2008 | 5/21/2008 |
| Benzene | 0.005 | mg/L | <0.0020 | <0.0020 | <0.0020 | <0.0020 | 0.236 | <0.0020 | <0.0020 | 0.0132 | <0.0020 | 0.0035 | 1.320 | 0.0116 | <0.0020 | <0.0020 |
| Ethylbenzene | 0.70 | mg/L | <0.0050 | <0.0050 | <0.0050 | <0.0050 | 0.0082 | <0.0050 | <0.0050 | 0.0387 | <0.0050 | 0.0017 | 1.230 | <0.005 | <0.0050 | <0.0050 |
| Toluene | 1.0 | mg/L | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.025 | <0.0050 | <0.0050 | 0.0014 | <0.0050 | <0.005 | 0.150 | <0.005 | <0.0050 | <0.0050 |
| Xylene (total) | 10.0 | mg/L | <0.0050 | <0.0050 | <0.0050 | <0.0050 | 0.014 | <0.0050 | <0.0050 | 0.0353 | <0.0050 | 0.001 | 1.010 | <0.005 | <0.0050 | <0.0050 |
| <u>Polynuclear Aromatic Hydrocarbons</u> | | | | | | | | | | | | | | | | |
| <u>8270 SIMS</u> | | | | | | | | | | | | | | | | |
| Acenaphthene | 0.42 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | 0.0217 | <0.0001 | 0.00961 | 0.0729 | 0.00390 | <0.0001 | <0.0001 |
| Acenaphthylene | 0.21 ⁽¹⁾ | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | 0.00024 | <0.0001 | <0.0001 | 0.0451 | <0.0001 | 0.00959 | 0.0217 | 0.00115 | <0.0001 | <0.0001 |
| Anthracene | 2.10 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | 0.00012 | <0.0001 | <0.0001 | 0.00388 | <0.0001 | 0.00027 | 0.00095 | 0.00021 | <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 | 0.00019 | <0.0001 | <0.0001 | <0.0005 | <0.00010 | <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 | <0.0005 | <0.00010 | <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 | <0.0005 | <0.00010 | <0.0001 | <0.0001 |
| Benzo(ghi)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 | <0.0005 | <0.00010 | <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 | <0.0005 | <0.00010 | <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 | <0.01 | <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 | 0.00012 | <0.0001 | <0.0001 | <0.0005 | <0.00010 | <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 | <0.0005 | <0.00010 | <0.0001 | <0.0001 |
| Diethyl phthalate | 5.60 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.005 | <0.00100 | <0.001 | <0.001 |
| Dimethyl phthalate | 70.0 ⁽¹⁾ | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.005 | <0.00100 | <0.001 | <0.001 |
| Di-n-butyl phthalate | 0.70 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.005 | <0.00100 | <0.001 | <0.001 |
| Fluoranthene | 0.28 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | 0.00184 | <0.0001 | <0.0001 | <0.0005 | <0.00010 | <0.0001 | <0.0001 |
| Fluorene | 0.28 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | 0.00586 | <0.0001 | 0.00056 | 0.015 | 0.00139 | <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 | <0.0005 | <0.00010 | <0.0001 | <0.0001 |
| m,p-Cresol | 0.035 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0005 | <0.00010 | <0.0001 | <0.0001 |
| Naphthalene | 0.14 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | 0.0399 | <0.0001 | <0.0001 | 0.00645 | <0.0001 | 0.00068 | 4.61 | <0.00010 | <0.0001 | 0.00015 |
| 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 | <0.0005 | <0.00010 | <0.0001 | <0.0001 |
| Phenanthrene | 0.21 ⁽¹⁾ | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | 0.0213 | <0.0001 | <0.0001 | 0.00522 | <0.00010 | <0.0001 | <0.0001 |
| Pyrene | 0.21 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | 0.00244 | <0.0001 | <0.0001 | <0.0005 | <0.00010 | <0.0001 | <0.0001 |
| Total PNA's except Naphthalene | --- | mg/L | <0.00013 | <0.00013 | <0.00013 | <0.00013 | 0.00037 | <0.00013 | <0.00013 | 0.102 | <0.00013 | 0.02 | 0.116 | 0.00665 | <0.00013 | <0.00013 |
| <u>Metals</u> | | | | | | | | | | | | | | | | |
| Arsenic 7060A | 0.05 | mg/L | 0.007 | 0.0007 | <0.003 | <0.003 | 0.0059 | <0.003 | <0.003 | 0.0069 | <0.003 | 0.0142 | 0.0194 | 0.0107 | <0.003 | <0.003 |
| Lead 7421 | 0.0075 | mg/L | <0.002 | 0.0017 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | 0.0004 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | 0.0005 |
| Chromium 6010B | 0.10 | mg/L | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | 0.0166 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | 0.019 | <0.01 |
| Cyanide (total) 9012A | 0.20 | mg/L | <0.007 | 0.186 | 0.098 | 0.36 | 0.761 | 0.043 | <0.007 | 0.916 | <0.007 | 0.965 | 2.28 | 2.67 | 0.004 | 0.007 |

⁽¹⁾ Non-TACO or provisional ROs published by the IEPA.

--- No ROs have been established.

Constituent exceeds Class 1 Groundwater Standards.

<0.0005 Laboratory method detection limit is higher than the Class 1 Groundwater Standards

mg/kg Milligrams per kilogram

<0.0001 Not detected at the detection limit identified.

TABLE 5-11
Groundwater Analytical Data - BTEX, PAHs, Metals, Cyanide
May 2008

Former MGP Site
Champaign, Illinois
AmerenIP

| CONSTITUENT | Class 1 | | UMW-118 | UMW-119 | UMW-120 | UMW-121 | UMW-300 | UMW-301 | UMW-302 | UMW-302D | UMW-303 | UMW-303D | UMW-304 | UMW-305 | UMW-306 | UMW-307 |
|--|----------------------|-------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Groundwater Standard | Units | 5/22/2008 | 5/22/2008 | 5/22/2008 | 5/21/2008 | 5/23/2008 | 5/21/2008 | 5/21/2008 | 5/21/2008 | 5/22/2008 | 5/22/2008 | 5/22/2008 | 7/10/2008 | 7/10/2008 | 7/10/2008 |
| Benzene | 0.005 | mg/L | <0.0020 | 0.0034 | <0.0020 | <0.0020 | <0.0020 | <0.002 | 1.320 | 1.33 | <0.0020 | <0.0020 | 0.0402 | <0.0020 | <0.0020 | <0.0020 |
| Ethylbenzene | 0.70 | mg/L | <0.0050 | 0.0062 | <0.0050 | <0.0050 | <0.0050 | <0.005 | 0.514 | 0.49 | <0.0050 | <0.0050 | 0.450 | <0.0050 | <0.0050 | <0.0050 |
| Toluene | 1.0 | mg/L | <0.0050 | <0.005 | <0.0050 | <0.0050 | <0.0050 | <0.005 | <0.0500 | <0.500 | <0.0050 | <0.0050 | 0.0076 | <0.0050 | <0.0050 | <0.0050 |
| Xylene (total) | 10.0 | mg/L | <0.0050 | 0.0066 | <0.0050 | <0.0050 | <0.0050 | 0.0029 | 0.160 | 0.150 | <0.0050 | <0.0050 | 0.150 | <0.0050 | <0.0050 | <0.0050 |
| <i>Polynuclear Aromatic Hydrocarbons</i> | | | | | | | | | | | | | | | | |
| <i>8270 SIMS</i> | | | | | | | | | | | | | | | | |
| Acenaphthene | 0.42 | mg/L | <0.0001 | 0.0023 | <0.0001 | <0.00045 | <0.0001 | 0.00078 | <0.0005 | 0.00011 | <0.0001 | <0.0001 | 0.00934 | <0.00010 | <0.00010 | <0.00010 |
| Acenaphthylene | 0.21 ⁽¹⁾ | mg/L | <0.0001 | 0.00152 | <0.0001 | <0.00045 | <0.0001 | 0.00902 | 0.0007 | 0.00069 | <0.0001 | <0.0001 | 0.00133 | <0.00010 | <0.00010 | <0.00010 |
| Anthracene | 2.10 | mg/L | <0.0001 | 0.00014 | <0.0001 | <0.00045 | <0.0001 | <0.0001 | <0.0005 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.00010 | <0.00010 | <0.00010 |
| Benzo(a)anthracene | 0.00013 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.00045 | <0.0001 | <0.0001 | <0.0005 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.00010 | <0.00010 | <0.00010 |
| Benzo(a)pyrene | 0.0002 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.00045 | <0.0001 | <0.0001 | <0.0005 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.00010 | <0.00010 | <0.00010 |
| Benzo(b)fluoranthene | 0.00018 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.00045 | <0.0001 | <0.0001 | <0.0005 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.00010 | <0.00010 | <0.00010 |
| Benzo(ghi)perylene | 0.21 ⁽¹⁾ | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.00045 | <0.0001 | <0.0001 | <0.0005 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.00010 | <0.00010 | <0.00010 |
| Benzo(k)fluoranthene | 0.00017 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.00045 | <0.0001 | <0.0001 | <0.0005 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.00010 | <0.00010 | <0.00010 |
| Bis(2-ethylhexyl)phthalate | 0.006 | mg/L | <0.002 | <0.002 | <0.002 | <0.00909 | <0.002 | <0.002 | <0.01 | <0.002 | <0.002 | <0.002 | <0.002 | <0.00200 | <0.00200 | <0.00200 |
| Chrysene | 0.0015 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.00045 | <0.0001 | <0.0001 | <0.0005 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.00010 | <0.00010 | <0.00010 |
| Dibenzo(a,h)anthracene | 0.0003 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.00045 | <0.0001 | <0.0001 | <0.0005 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.00010 | <0.00010 | <0.00010 |
| Diethyl phthalate | 5.60 | mg/L | <0.001 | <0.001 | <0.001 | <0.00455 | <0.001 | <0.001 | <0.005 | <0.001 | <0.001 | <0.001 | <0.001 | <0.00100 | <0.00100 | <0.00100 |
| Dimethyl phthalate | 70.0 ⁽¹⁾ | mg/L | <0.001 | <0.001 | <0.001 | <0.00455 | <0.001 | <0.001 | <0.005 | <0.001 | <0.001 | <0.001 | <0.001 | 0.00062 | <0.00100 | <0.00100 |
| Di-n-butyl phthalate | 0.70 | mg/L | <0.001 | 0.00051 | <0.001 | <0.00455 | <0.001 | 0.0005 | <0.005 | <0.001 | <0.001 | <0.001 | <0.001 | <0.00100 | <0.00100 | <0.00100 |
| Fluoranthene | 0.28 | mg/L | <0.0001 | 0.0003 | <0.0001 | <0.00045 | <0.0001 | <0.0001 | <0.0005 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.00010 | <0.00010 | <0.00010 |
| Fluorene | 0.28 | mg/L | <0.0001 | 0.00068 | <0.0001 | <0.00045 | <0.0001 | <0.0001 | <0.0005 | <0.0001 | <0.0001 | <0.0001 | 0.0001 | <0.00010 | <0.00010 | <0.00010 |
| Indeno(1,2,3-cd)pyrene | 0.00043 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.00045 | <0.0001 | <0.0001 | <0.0005 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.00010 | <0.00010 | <0.00010 |
| m,p-Cresol | 0.035 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.00045 | <0.0001 | 0.00312 | 0.00969 | 0.00996 | 0.00175 | 0.0018 | 0.00391 | <0.00010 | <0.00010 | <0.00010 |
| Naphthalene | 0.14 | mg/L | <0.0001 | 0.00092 | <0.0001 | <0.00045 | <0.0001 | 0.00073 | 3.36 | 3.57 | 0.00009 | <0.0001 | 0.0275 | <0.00010 | <0.00010 | <0.00010 |
| o-Cresol | 0.35 | mg/L | <0.0001 | 0.0001 | <0.0001 | <0.00045 | <0.0001 | 0.0001 | <0.0005 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.00010 | <0.00010 | <0.00010 |
| Phenanthrene | 0.21 ⁽¹⁾ | mg/L | <0.0001 | 0.0001 | <0.0001 | <0.00045 | <0.0001 | 0.0001 | <0.0005 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.00010 | <0.00010 | <0.00010 |
| Pyrene | 0.21 | mg/L | <0.0001 | 0.00039 | <0.0001 | <0.00045 | <0.0001 | 0.0001 | <0.0005 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.00010 | <0.00010 | <0.00010 |
| Total PNA's except Naphthalene | --- | mg/L | <0.00013 | 0.00532 | <0.00013 | <0.00059 | <0.00013 | 0.0098 | 0.0007 | 0.0008 | <0.00013 | <0.00013 | 0.0108 | <0.00013 | <0.00013 | <0.00013 |
| <i>Metals</i> | | | | | | | | | | | | | | | | |
| Arsenic 7060A | 0.05 | mg/L | 0.0078 | 0.0012 | 0.0015 | <0.003 | 0.002 | 0.0011 | 0.002 | 0.0017 | 0.0023 | 0.0038 | <0.003 | 0.0016 | 0.0018 | 0.003 |
| Lead 7421 | 0.0075 | mg/L | 0.0151 | 0.0015 | 0.0029 | <0.002 | 0.0006 | 0.001 | <0.002 | 0.0022 | <0.002 | 0.0004 | <0.002 | <0.0020 | <0.0020 | 0.0011 |
| Chromium 6010B | 0.10 | mg/L | 0.0266 | <0.01 | 0.0044 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.0100 | <0.0100 | >0.0100 |
| Cyanide (total) 9012A | 0.20 | mg/L | 0.047 | 0.013 | <0.007 | 0.415 | <0.007 | <0.007 | 0.044 | 0.045 | <0.007 | <0.007 | 0.031 | <0.007 | 0.010 | 0.016 |

⁽¹⁾ Non-TACO or provisional ROs published

--- No ROs have been established.

Constituent exceeds Class 1 Groundwa

<0.0005 Laboratory method detection limit is hig

mg/kg Milligrams per kilogram

<0.0001 Not detected at the detection limit identified.