



January 23, 2012

Greg Dunn  
Voluntary Site Remediation Unit B  
Remedial Project Management Section  
Division of Remediation Management  
1021 North Grand Ave East  
P.O. Box 19276  
Springfield, IL

**Subject: Shallow and Intermediate Monitoring Well Installations  
AmerenIP Champaign MGP Site  
State ID 0190100008**

Dear Greg:

Ameren hereby proposes the installation of five shallow groundwater monitoring wells and one intermediate groundwater monitoring well at our Champaign MGP site. These wells will be installed within site boundaries of the former Manufactured Gas Plant (MGP) site located at 308 N. 5<sup>th</sup> Street. Five shallow monitoring wells (UMW-124, UMW-125, UMW-126, UMW-127, and UMW-128) will be installed to monitor the shallow groundwater elevations. One intermediate depth monitoring well (UMW-304R) will be installed to monitor the intermediate depth groundwater elevation and to collect groundwater samples for chemical analysis. The five shallow and one intermediate depth monitoring wells are being installed to replace the previously abandoned monitoring wells that existed within the Ameren property boundary prior to the 2009-2011 excavation activities.

The shallow wells will be installed in the general location of the former on-site shallow wells. The intermediate depth monitoring well is being installed to replace the previously abandoned well UMW-304 that was removed prior to excavation activities. UMW-304R will be installed in the same location as its original. A drawing showing the proposed locations of the five shallow and one intermediate depth wells are presented in Attachment 1.

Our consultant, PSC, will utilize a truck mounted drill rig (CME-75) equipped with hollow stemmed 4.25-inch I.D. augers to advance five soil borings to approximately 15-feet below ground surface (bgs) and one soil boring to approximately 29-feet bgs. A Mud Rotary rig will be used to advance the intermediate depth boring from 29-feet bgs to 45-feet bgs. A 6-inch diameter threaded schedule 40 PVC protective casing will be installed in the intermediate depth borehole. This protective surface casing is being installed to protect any potential soil impacts from below the excavation backfill to the intermediate depth groundwater zone. The casing will be grouted in-place from the ground surface to 29-feet bgs or immediately below the surface casings bottom.

PSC will not be collecting soil samples as the borings will be located in recently-placed clean backfill.

Shallow depth monitoring wells will be constructed using a 5-foot, two-inch diameter flush-threaded Schedule 40 PVC riser. A 10-foot (0.010-inch slotted) screen section will be initiated at 5 feet bgs and extend to 15 feet bgs. Each well will be completed with traffic rated, flush-mount well protectors. Clean silica sand (sand pack) material will be installed in the annular space between the borehole and the well screen. The sand pack will be installed to a depth of approximately two-feet above the top of the well screen. Bentonite chips will be placed in the annular space above the sand pack to a depth of approximately two feet bgs. The bentonite will be hydrated with water after placement. Premix concrete will be used to backfill the annular space above the bentonite seal to the ground surface.

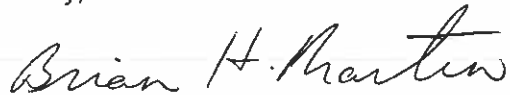
The intermediate depth monitoring well will be constructed within the ground surface casing using a 35-foot long two-inch diameter flush-threaded Schedule 40 riser. A 10-foot (0.010-inch slotted) screen section will be initiated at 35 feet bgs and extend to 45 feet bgs. The well will be completed with a traffic rated, flush-mount well protector. Clean silica sand (sand pack) material will be installed in the annular space between the surface casing and well screen. The sand pack will be installed to a depth of approximately two-feet above the top of the well screen.

Bentonite chips will be placed in the annular space above the sand pack to a depth of approximately two feet bgs. The bentonite will be hydrated with water after placement. Premix concrete will be used to backfill the annular space above the bentonite seal to the ground surface.

Approximately two weeks after monitoring well installation, the wells will be developed. Development will consist of purging the well of a minimum of five well casing volumes or until the field measurements of pH, specific conductivity, temperature, and dissolved oxygen stabilize. Once these monitoring wells have been developed, they will be included in the next quarterly groundwater sampling event for the site.

If you have any questions or require further information, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Brian H. Martin". The signature is written in a cursive style and is positioned above a horizontal line.

Brian H. Martin, CHMM  
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Enclosures: Attachment 1 Well Location Map

cc: Pete Sazama - PSC