

Kemmanahalli, Pad

From: Kemmanahalli, Pad
Sent: Wednesday, September 28, 2016 2:10 PM
To: 'Crooks, Carol'
Subject: Supplemental RI Work Plan : Greenwood Itron site
Attachments: Supplemental RI Work Plan_9_28_16_FINAL.pdf

Dear Ms. Crooks:

Attached is the Supplemental RI Work Plan for the above referenced site prepared by our consultant – URS (aka AECOM).

Itron has begun the process of identifying the off-site property in order to obtain access to conduct this phase of work specified in the attached work plan.

Please review and confirm acceptance of the attached Work Plan.

Once we get your go-ahead and approval(s) from the off-site property owner(s), we will share the site work schedule with you so that you can be on the site as was specified during our meeting on site in June 2016.

Sincerely,



Pad Kemmanahalli, CSP, CHMM
Corporate Senior Director, Global HSE &
Sustainability

1111 Broadway, Suite 1800
Oakland, CA 94607
USA

+1 510.844.2882 (O)
+1 510.362.4461 (M)

Knowledge to **Shape Your Future**

RECEIVED

OCT 10 2016

**SITE ASSESSMENT,
REMEDICATION &
REVITALIZATION**



RECEIVED

September 28, 2016

OCT 10 2016

SITE ASSESSMENT,
REMEDICATION &
REVITALIZATION

Mr. Pad Kemmanahalli
Corporate Senior Director, Global HSE & Sustainability
Itron, Inc.
1111 Broadway, Suite 1800
Oakland, CA 94607

Re: Supplemental Work Plan for Continued Groundwater Investigation and Sampling
Itron, Inc., 1310 Emerald Road, Greenwood, SC
Voluntary Cleanup Contract 13-6079-RP

Dear Mr. Kemmanahalli,

URS is pleased to submit this supplemental work plan for continued groundwater investigation and sampling at the above referenced site. The additional investigation was requested by the South Carolina Department of Health and Environmental Control (SCDHEC) in a letter dated May 19, 2016. As an initial response to SCDHEC, Mr. Pad Kemmanahalli of Itron and Mr. Aaron Council of URS met with Ms. Carol Crooks of SCDHEC at the site on June 28, 2016 to discuss the requested investigation. Following the site visit, Mr. Kemmanahalli responded to Ms. Crooks via e-mail on August 05, 2016, indicating Itron would investigate groundwater conditions off-site and east of monitoring well MW-20, revise PCE contamination contour, (Figure 13), conduct a Feasibility Study and in addition sample a list of monitoring wells. In a letter dated September 7, 2016, SCDHEC agreed with Itron's recommendations but requested the addition of monitoring wells MW-6 and MW-12 to the sampling list. The correspondence also requested that a work plan be submitted to SCDHEC for review and approval.

Thus, this supplemental work plan describes the anticipated scope of work and incorporates by reference the methods discussed in the initial Remedial Investigation (RI) work plan (URS 2013a) submitted to SCDHEC in November 2013.

The following activities will be performed as part of the scope of work for this project:

- The Health and Safety Plan (URS 2013b) prepared prior to the implementation of the RI work plan will be reviewed and updated as needed to include the scope of work described in this supplemental work plan.
- As a portion of the proposed scope of work will be performed on an off-site property, Itron with URS/AECOM will negotiate an off-site property access agreement prior to the

URS/AECOM
10 Patewood Drive, Building 6, Suite 500
Greenville, South Carolina 29615
Tel: 864.234.4000
Fax: 864.234.3069



commencement of work. Itron will notify SCDHEC if the adjacent property owner is reluctant or unwilling to provide reasonable access.

- In order to assess groundwater conditions east of monitoring well MW-20, a Geoprobe® (direct-push technology) will be utilized to advance three borings (SGWI-1 SGWI-2 and SGWI-3) to an approximate depth of 70 feet below ground surface (bgs). Groundwater samples will be collected from varying intervals and analyzed for volatile organic compounds (VOCs) per EPA Method 8260B, to assist with selecting an appropriate location for a permanent monitoring well. This new well will be designated MW-23. The groundwater investigation points are shown on attached **Figure 1**.
- One intermediate-depth monitoring well will be installed to further delineate the extent of chemicals of potential concern (COPC) in groundwater east of monitoring well MW-20. The location of the new well (MW-23) will be determined based on the results of the groundwater samples collected during the direct-push activities described above.
- Installation procedures for the intermediate well are described in Section 7.2.2 of the RI work plan (URS 2013a). The proposed intermediate well will be installed using the same procedures as the deep well installations. However, soil sampling and field screening methods (e.g., PID readings) described in the RI work plan will not be utilized during the installation of MW-23 due to the distance from the known source area.
- The new well will be developed as described in Section 7.2.3 of the RI work plan (URS 2013a).
- The new well will be surveyed by a South Carolina licensed surveyor as described in Section 7.4 of the RI work plan (URS 2013a).
- Investigative Derived Waste (IDW) will be managed as described in Section 7.5 of the RI work plan.
- Approximately 1 to 2 weeks after development of the new well (MW-23), a total of 17 wells, which will include MW-1, MW-2, MW-5D, MW-6, MW-7, MW-9, MW-10R, MW-10I, MW-11, MW-12, MW-15R, MW-17, MW-19, MW-20, MW-21, MW-22D, and the newly installed MW-23 will be gauged and sampled as described in Section 7.2.4 and Appendix B FSAP of the RI work plan (URS 2013a).
- All groundwater samples will be analyzed for VOCs by EPA Method 8260B. Trip blanks, equipment blanks, duplicates and matrix spike (MS) and matrix spike duplicates (MSD) will be collected per the FSAP.



- Procedures and methods described in the Quality Assurance Project Plan (QAPP) included as Appendix C of the RI work plan (URS 2013a) will be followed, including a data quality review of the groundwater analytical results for the samples collected from the abbreviated list of groundwater monitoring wells.
- At the conclusion of field activities, URS will prepare an addendum to the Supplemental RI report that summarizes the findings. The addendum report will include a photo log, monitoring well log and water well records, survey report, well development log, groundwater sampling logs, laboratory reports, IDW waste manifests, groundwater quality tables and updated potentiometric surface maps and an updated groundwater quality maps.. Per comment 3 in the SCDHEC letter, dated May 19, 2016, the groundwater quality map submitted with the report will be revised as requested.

If you have any questions, please do not hesitate to contact us at 206-438-2700.

Sincerely,

URS, A subsidiary of AECOM

A handwritten signature in black ink that reads "Aaron S. Council".

Aaron S. Council
Environmental Specialist

A handwritten signature in black ink that reads "Jim Flynn".

Jim Flynn, RG, LHG
Senior Project Manager

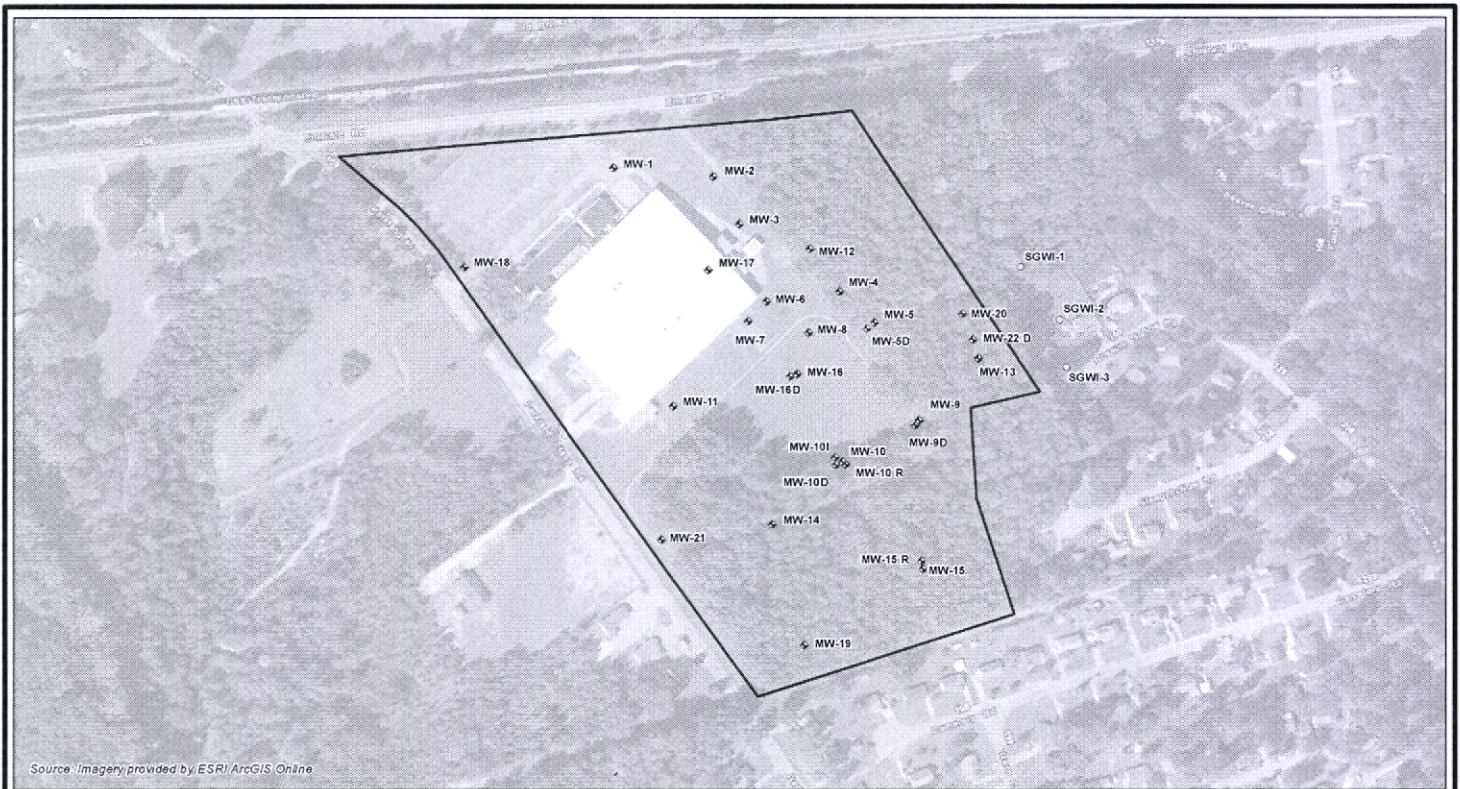
Attachments:

Figure 1 – Monitoring Well Location Map / Proposed Groundwater Investigation Locations



References:

- SCDHEC 2016. *Supplemental Remedial Investigation Report Comments Letter, Itron Site, Greenwood County*, Voluntary Cleanup Contract 13-6079-RP. May 19.
- SCDHEC 2016. *Response to Comments Regarding Review of Remedial Investigation Report, Itron Site, Greenwood County*, Voluntary Cleanup Contract 13-6079-RP. September 7.
- SCDHEC 2015. *Remedial Investigation Report Comments Letter, Itron Site, Greenwood County*, Voluntary Cleanup Contract 13-6079-RP. March 3.
- SCDHEC 2015. *Remedial Investigation Report Comments Letter, Itron Site, Greenwood County*, Voluntary Cleanup Contract 13-6079-RP. March 3.
- URS 2013a. *Remedial Investigation Work Plan, Itron Inc., 1310 Emerald Road, Greenwood, South Carolina*. URS Corporation, Greenville, South Carolina. November.
- URS 2013b. *Health and Safety Plan, Itron Inc., 1310 Emerald Road, Greenwood, South Carolina*. URS Corporation, Greenville, South Carolina. November.



Source: Imagery provided by ESRI/ArcGIS Online

- Legend**
- Groundwater Investigation Point
 - ◆ Shallow Monitoring Well
 - ✦ Intermediate Monitoring Well
 - ✦ Deep Monitoring Well
 - ▭ Itron Property Line (Approximate)

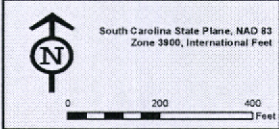


Figure 1
Monitoring Well Location Map/
Proposed Groundwater
Investigation Locations