

**7th Avenue & Bethany Home Road, 16th Street and Camelback, and Central & Camelback
Water Quality Assurance Revolving Fund (WQARF) Sites'
Community Advisory Board (CAB) Public Meeting**

Wednesday, June 17, 2015

5:30 p.m. - 7:30 p.m.

**A.L. Moore-Grimshaw Mortuaries Bethany Chapel
710 West Bethany Home Road
Phoenix, AZ 85013**

FINAL MINUTES

CAB Members Present: Stan Watts; Chad Johnson; Paul Barquinero; Pam Perry; Paul “Tom” Cox; Anthony Ricci and Peter Zorbas.

CAB Members Absent: Daniel Kingston; Lynn Morrow; Alicia Hawley; Maureen Rooney

ADEQ Staff Present: Wendy Flood, Lead Community Involvement Coordinator; Kevin Snyder, Project Manager; Scott Goodwin, Project Manager; Scott Green, Remedial Projects Unit Manager

Members of Public Present: Julie Riemenschneider, City of Phoenix; Kirk Craig, Geosyntec; and Janet Workman, URS Corporation

1. Call to Order/Introductions

Ms. Wendy Flood called the meeting to order; introduced Mr. Chad Johnson.

2. Acceptance and/or Changes to March 11, 2015 Minutes

The CAB agreed there were no changes requested to the minutes. Mr. Paul Barquinero moved to accept minutes as written. It was seconded by Mr. Peter Zorbas; motion passed.

3. Community Involvement Plan Review/Vote

Ms. Flood received comments from Ms. Maureen Rooney and reviewed them with the CAB. Ms. Rooney noted that in Appendix B there are no neighborhood associations in the 16th St. & Camelback site. She provided a link to gather better information. She also noted Appendix H - Related Agencies Contact Information, does not include SRP. She agreed with the suggestion to publish meeting notifications in the North Central News.

Ms. Flood informed the CAB any entity listed in the Appendices is automatically included on the mailing list and it is their responsibility to notify if they wish to be removed. CAB members will be notified if something is published in the North Central News for them to pass along.

Mr. Cox talked about local network group meetings such as Biltmore Networking Group,

Latino Business Networking Group, Arizona Regional Mission Network Group, and they're always looking for people to give short presentations. Ms. Flood requested information for those groups be sent to her. The CAB was encouraged to reach out to these and other groups.

Mr. Watts was pointed out that Chapter 3 seems to only address the first two sites; needs to be updated to reflect the third site. He also stated the comments were dated and maybe an update should be noted for items that have changed like the meeting location. Ms. Flood said the reason that the 16th Street site was not in the document is that at the time it was prepared that site had not been included; it will be added. Chapter 19 stated a selection committee was not done for 16th Street and Ms. Flood stated she will get the text updated.

Appendix B contact information for Windsor Square was not included and Mr. Watts offered to be the contact. Ms. Perry offered her contact information for Pierson Place association.

Mr. Anthony Ricci commented on item five in the introduction, the phases were color coded to match the chart starting on page 17; a footnote should be added in the introduction to explain that they are color coded for easier reference.

Mr. Stan Watts moved to accept the Community Involvement Plan with additions and comments as stated by the CAB. Ms. Pam Perry seconded; motion passed.

4. 16th Street and Camelback WQARF Site Updates and Future site activities

Mr. Kevin Snyder showed a photo of the site and covered the historical work that's been completed and activities that occurred since the last CAB meeting. The Feasibility Study (FS) is near completion. The public notice should go out on July 2nd & July 9th. Based on the results of the FS, monitored natural attenuation looks to be the best option which involves groundwater monitoring and sampling over time as the contaminants start naturally degrading and decomposing. Mr. Snyder reviewed the contents of the FS report with the CAB and the next steps in the WQARF process.

Mr. Ricci asked how much lower water levels have to drop before the wells' effectiveness is compromised. Mr. Snyder responded about 100 feet and hopefully the contaminants will attenuate before wells are lost.

5. Central and Camelback WQARF Site Updates and Future site activities

Mr. Snyder presented an update on the Central and Camelback site. He reviewed the progress of the site stating the FS stage was just finished and then reviewed site maps and activities completed since the last meeting.

He commented that as the soil gas concentrations decline ADEQ will alter the SVE operation to maximize efficiency and do some sampling when the soil is cleaned up. If not, ADEQ may add a well. The groundwater extraction well concentrations were lower in February after startup from the shutdown in January and early February.

Mr. Snyder also informed the CAB the plume has been shrinking in size and concentrations partly due to natural degradations. The SVE system is running well. According to quarterly performance tests goals are being met. PCE concentrations have dropped over time. There may be some adjustments to the operation if levels continue to drop. ADEQ will definitely keep the systems running and continue to watch water levels and sample surrounding area.

Mr. Barquinero inquired about the Southwest corner and how habitable the area is. Mr. Snyder replied that it is definitely habitable; it is more of a groundwater concern than soil. ADEQ will keep the system running and it seems to be helping with the groundwater.

6. 7th Avenue and Bethany Home Road WQARF Site Proposed Remedial Action Plan (PRAP) review & presentation

Mr. Scott Goodwin covered the site progress and stated the PRAP was issued for comment April 23. The PRAP does recommend enhanced reductive dechlorination as the remedy. Mr. Goodwin summarized the final concentrations at the pilot test monitor wells on the site. He discussed the remedy and proposed site activities, including the plans for installing the injection system wells and a few more monitor wells.

Mr. Barquinero asked about the consent order signed and Mr. Goodwin stated the Bayless Investment and Trading Company did settle.

Ms. Flood commented that due to this site being close to remedy selection, there is not the same need to present information. Site updates may be given once a year.

7. CAB Call to Action presentation

Mr. Scott Green presented a summary of WQARF, the phases of WQARF, the funding process, the purpose, and what the CAB responsibilities are. He also explained how ADEQ has attempted to improve the WQARF process. He summarized the WQARF accomplishments over the last year and explained how these accomplishments compare to previous years.

Based on the funding for Fiscal Year 2016, ADEQ will be able to continue Interim Remedial Actions (drinking water systems), continue Early Response Actions (mass removal systems-SVE, groundwater containment systems). Much of the site work is on hold as of July 1, 2015.

Mr. Green asked that the CAB members write letters to the Legislature commenting on the work that has been done and requesting more funding for Fiscal Year 2017.

Ms. Flood discussed with the CAB how they wanted to take action, collectively or individually, and asked that they copy her on any correspondence. The CAB discussed and decided to draft a letter collectively; therefore a meeting will be required.

Mr. Zorbas felt that it would be more effective to write a letter expressing their feelings as a group.

Ms. Perry recommended that the letters go to the legislators, then to the subcommittees. This letter could be a model for other CABs to use. She also felt that by not allowing ADEQ to do clean up, the ability of communities to develop properties are also affected and should be addressed in the letter.

Mr. Cox volunteered to draft a letter and distribute it to the CAB members for their review.

The CAB also discussed reaching out to the community to ask them to get involved as well, the letter and the presentation should be used as a guide.

Ms. Flood will send out the draft once received and schedule the next meeting.

8. CAB outreach discussion

Mr. Barquinero recommended opening up a conversation about what's going on at the sites when you are in a social setting.

Mr. Snyder suggested getting the information into the North Central News and including Mr. Johnson and Mr. Watts contact information.

Ms. Perry also recommends using Nextdoor as an outlet for information.

Mr. Watts commented that Mr. Green's presentation is also a positive message about what has been going on at ADEQ. ADEQ has been doing positive work.

Ms. Flood referenced a copy of the public notice and that it was going out June 18. CAB members will receive a copy in the mail and it will be posted on the website.

Ms. Flood asked whether the CAB felt that the meeting minutes were comprehensive enough. The consensus was that more detail would be preferable and are satisfied with the level of detail in the presentations.

9. Call to the Public

Ms. Reimenschneider, City of Phoenix, asked if the PRAPs and RODs are not complete by July 1 will they still be completed at a later time. Mr. Green responded yes. She added, the city is concerned about the decrease in WQARF funds as well, since many WQARF sties are within the City.

10. Future Meeting / Agenda

A meeting will be schedule with the CAB as soon as the draft letter is received.

11. Adjournment

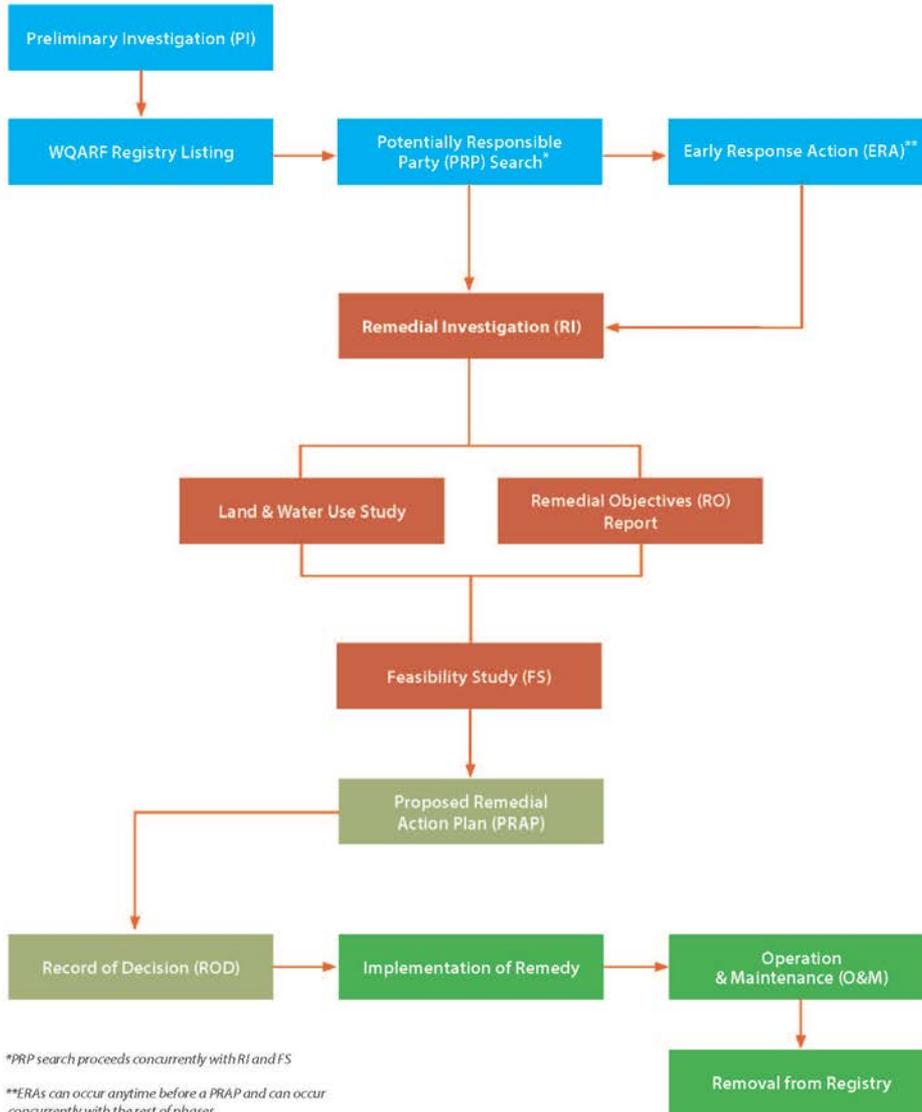
The meeting adjourned at 7:30 p.m.



7th Avenue & Bethany Home Road Water Quality Assurance Revolving Fund Site

Community Advisory Board Meeting June 17, 2015

WQARF PHASES



- Proposed Remedial Action Plan (PRAP) issued on April 23, 2015. Reductive de-chlorination is the proposed remedy.
- Comments on the PRAP were due by Wednesday May 27th, 2015. Two set of comments received. No revision to the Record of Decision (ROD) planned based on comments received.

- Pursuant to Arizona Revised Statutes §49-287.04, letters were sent to 18 potentially responsible parties on April 27, 2015. ADEQ is currently reviewing responses.
- Letters indicated past costs at the site were \$1,767,715.05. Future cost of the remedy was estimated in the PRAP at \$2,208,000. Total project costs are approximately \$3,900,000.



- Legend**
- ▲ Proposed Nested Injection Well
 - ◆ Monitor Well
 - ▲ Injection Well
 - Proposed Injection Transect
 - March 2014 Groundwater Elevation Contours (ft amsl)
 - Former Buildings
 - General Groundwater Direction

Monitor Well Name	March 2014 Groundwater Elevation (ft amsl)	PCE Concentration (µg/L)
MW-1	1075.30	259 µg/L
0.00 = Not Sampled (NS)		

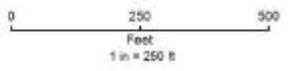


Figure 5
Recommended Design for Alternative 1:
In Situ Enhanced Reductive Dechlorination
with Monitored Natural Attenuation
7th Ave & Bethany Home Rd
WQARF Site

Source:
 Project Features: ARCADIS 2014
 Imagery: Source: Esri, DigitalGlobe,
 GeoEye, Earthstar Geographics,
 CNES/Airbus DS, USDA, USGS, AEK



- It is anticipated the remedy will take 15 years with injection taking place over the first 9 years and 7 years of monitoring after injections cease.
- ADEQ hopes to complete the draft ROD by the end of Fiscal Year 2015.

Questions?

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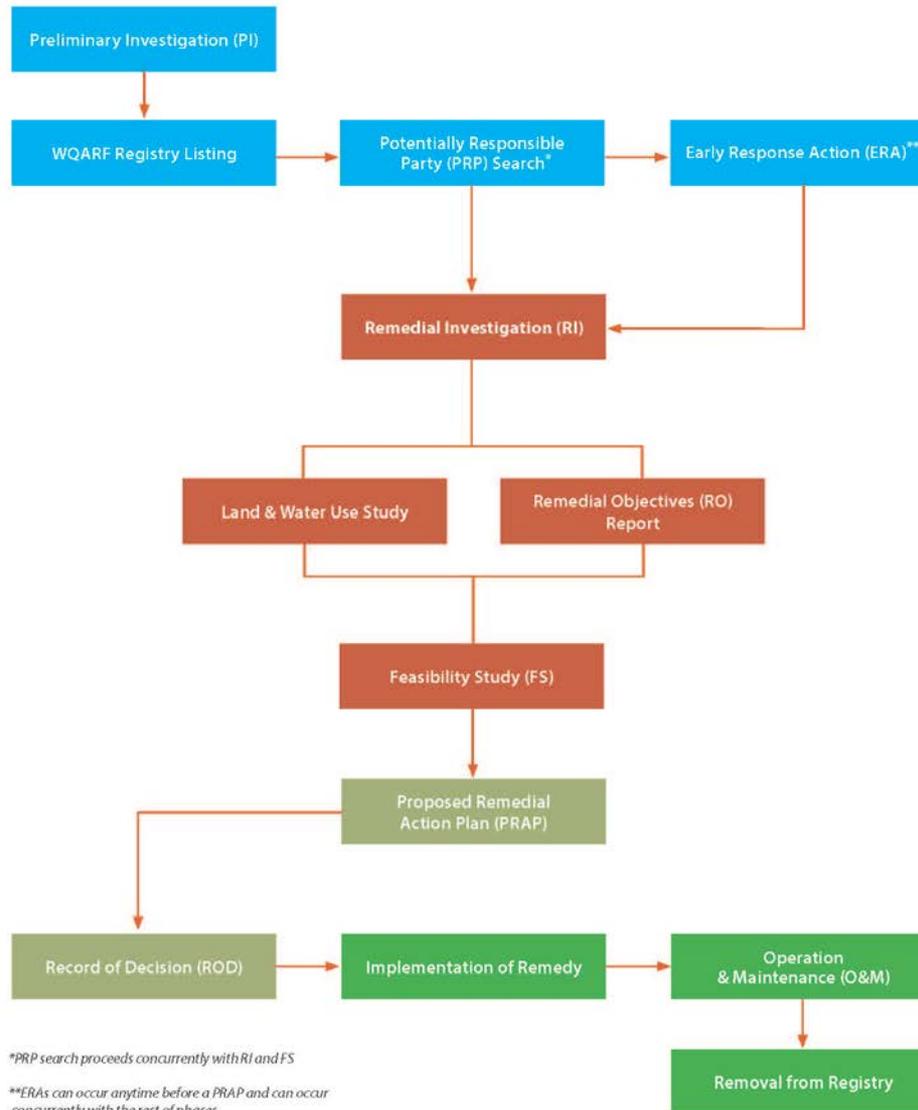
16th Street and Camelback WQARF Site

Kevin Snyder, Project Manager

Wendy Flood, Community Involvement Coordinator

June 17, 2015 5:30pm

WQARF PHASES





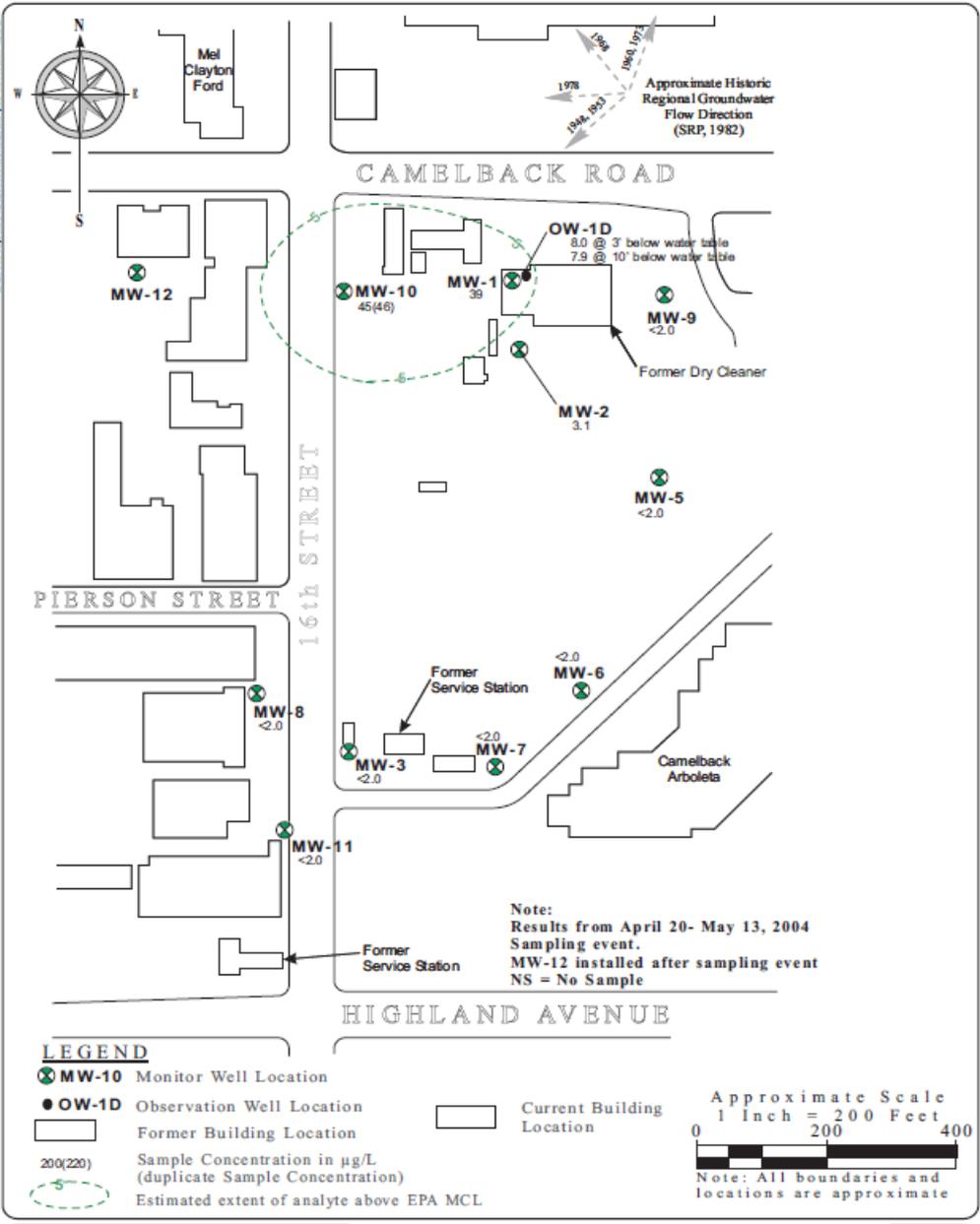
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, I-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Events Since March 2015 CAB Meeting

- ADEQ completed the Remedial Investigation (RI) and Remedial Objective (RO) reports and Feasibility Study (FS) Workplan this spring.
- Conducted groundwater monitoring and sampling in February/March 2015. Had an anomalous high concentration at well MW-1 due to sampling error.
- ADEQ about to finalize the FS Report.
- Because contaminants are declining in concentration and present no risk to human health and the environment, the planned remedial option will be Monitored Natural Attenuation (MNA).
- MNA will involve monitoring and sampling groundwater.
- If a water provider installs a well, ADEQ will add Well-head Treatment to the well.

L:\Quality\Projects\51252\Isoconcentration.mxd MW-12.dwg

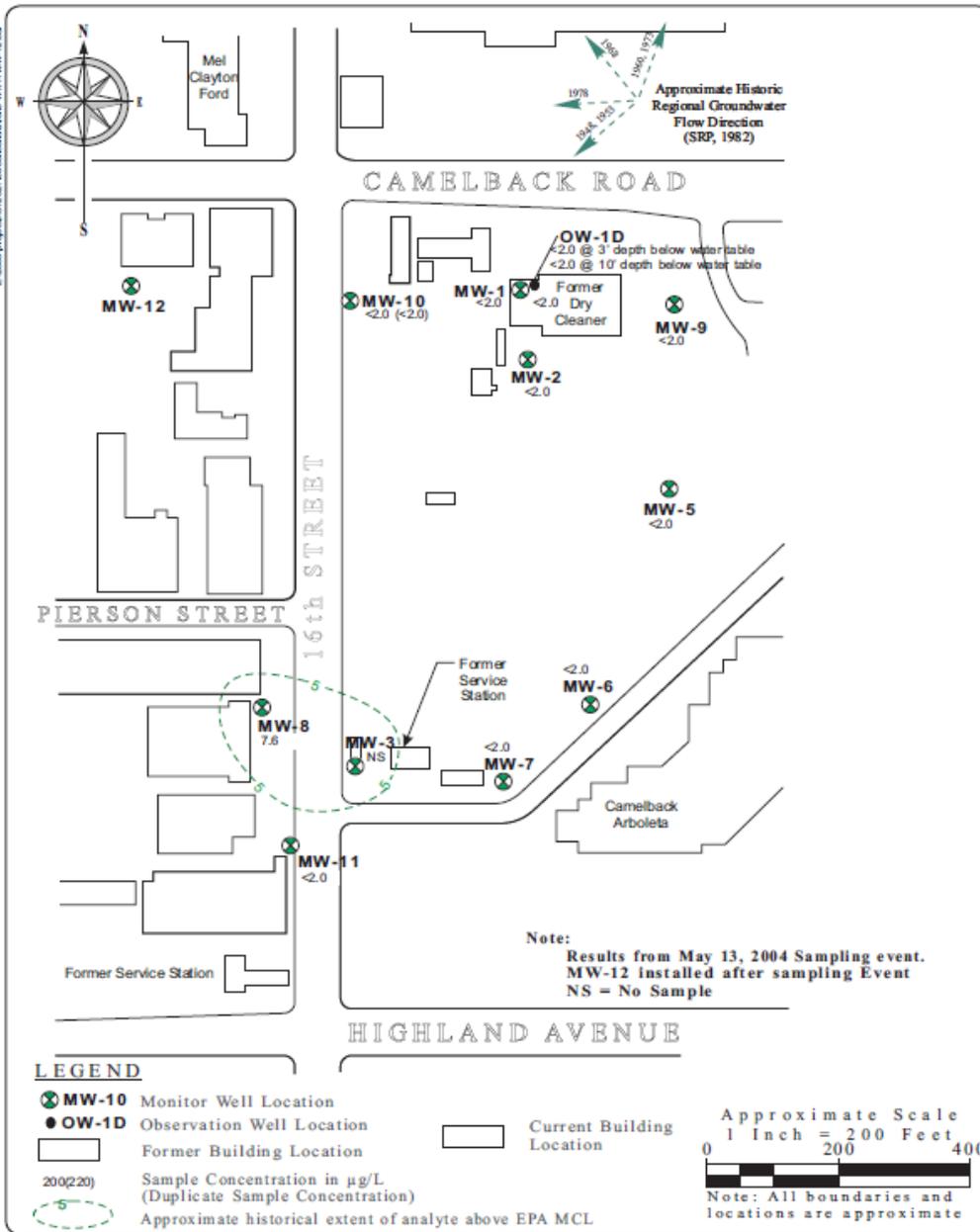


KLEINFELDER
 Project Number 51252 January 2005

Arizona Department of Environmental Quality
 16th Street and Camelback Road WQARF Site
 Phoenix, Arizona

**ISOCONCENTRATION
 CONTOUR MAP FOR PCE**

PLATE
5



Events Since March 2015 CAB Meeting (continued)

- PCE is currently the only contaminant of concern detected in groundwater at the site at concentrations greater than the Aquifer Water Quality Standard (AWQS) of 5 micrograms per liter (ug/L).

Contaminant	December 1999	August 2007	April 2014	February – March 2015
PCE	160 ug/l	20 ug/l	11.4 ug/l	25.2?/12.9 ug/l
1,2-DCA	400 ug/l	<2.0 ug/l	0.62 ug/l	<0.5 ug/l
1,2-DCP	15 ug/l	<2.0 ug/l	<0.5 ug/l	<0.5 ug/l

Events Since March 2015 CAB Meeting (continued)

- Groundwater levels have declined an average of approximately 21 inches during 2014 and 2015 sampling events.

Well ID	May 2013	February 2015	Total Change 2014 & 2015
MW-1	76.17	78.25	-2.08
OW-1D	75.85	77.81	-1.96
MW-2	74.49	76.82	-2.33
MW-3	73.28	75.30	-2.02
MW-5	74.55	76.52	-1.97
MW-6	not measured	76.62	0.62
MW-7	75.01	77.07	-2.06
MW-8	73.63	75.58	-1.95
MW-9	76.35	78.33	-1.98
MW-10	75.95	77.90	-1.95
MW-11	72.29	74.31	-2.02
MW-12	75.91	78.00	-2.09
MW-13	not measured	81.05	-1.36
MW-14	not measured	78.40	-1.45

- Continue to monitor and sample groundwater.
- Prepare Proposed Remedial Action Plan (PRAP) and Record of Decision (ROD).



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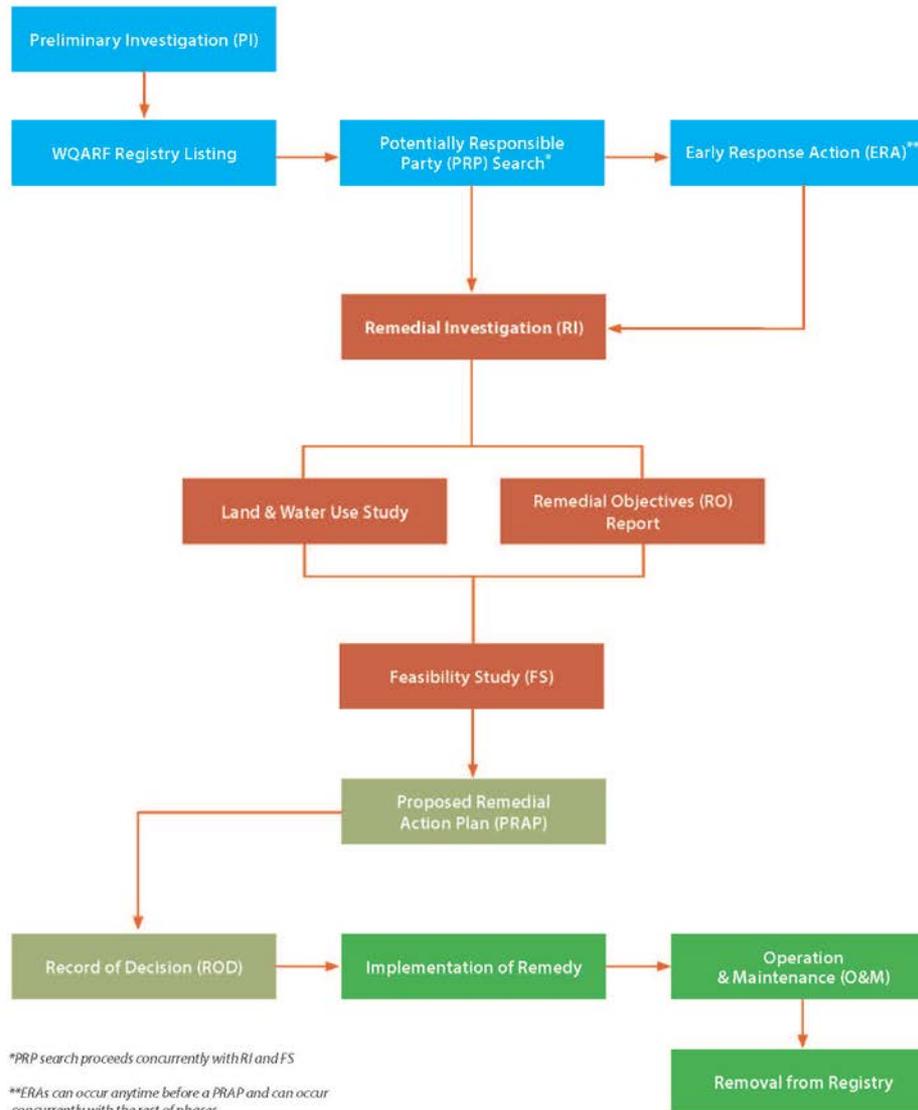
Central and Camelback WQARF Site

Kevin Snyder, Project Manager

Wendy Flood, Community Involvement Coordinator

June 17, 2015 5:30 pm

WQARF PHASES



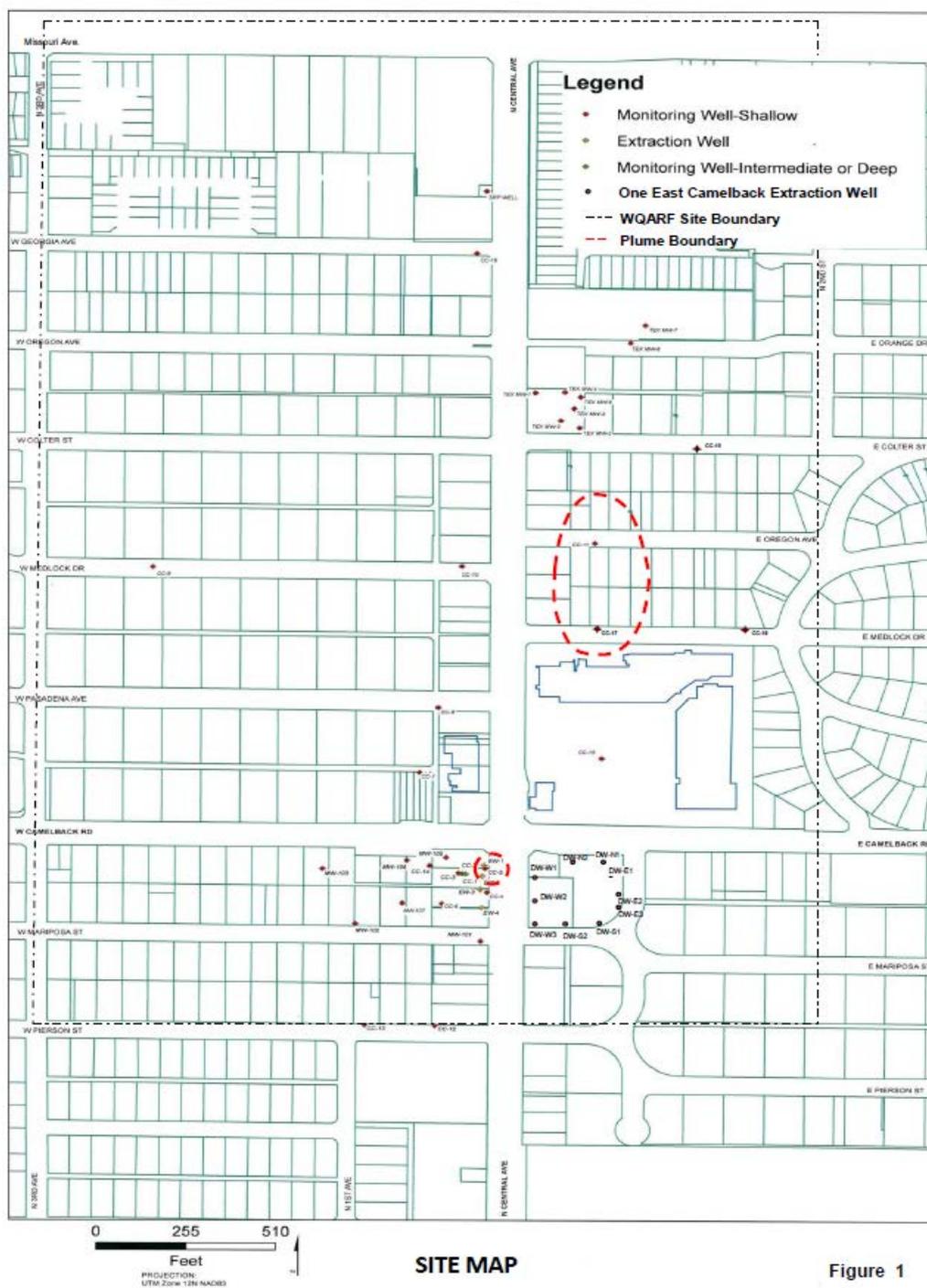


Figure 1

Groundwater Treatment Compound



EW-1

CC-5

EW-2

EW-3

SVE Compound

SVE-1

SVE-FC

SVE-MP1

SVE-2S

SVE-2D

EW-4

SVE-MP2

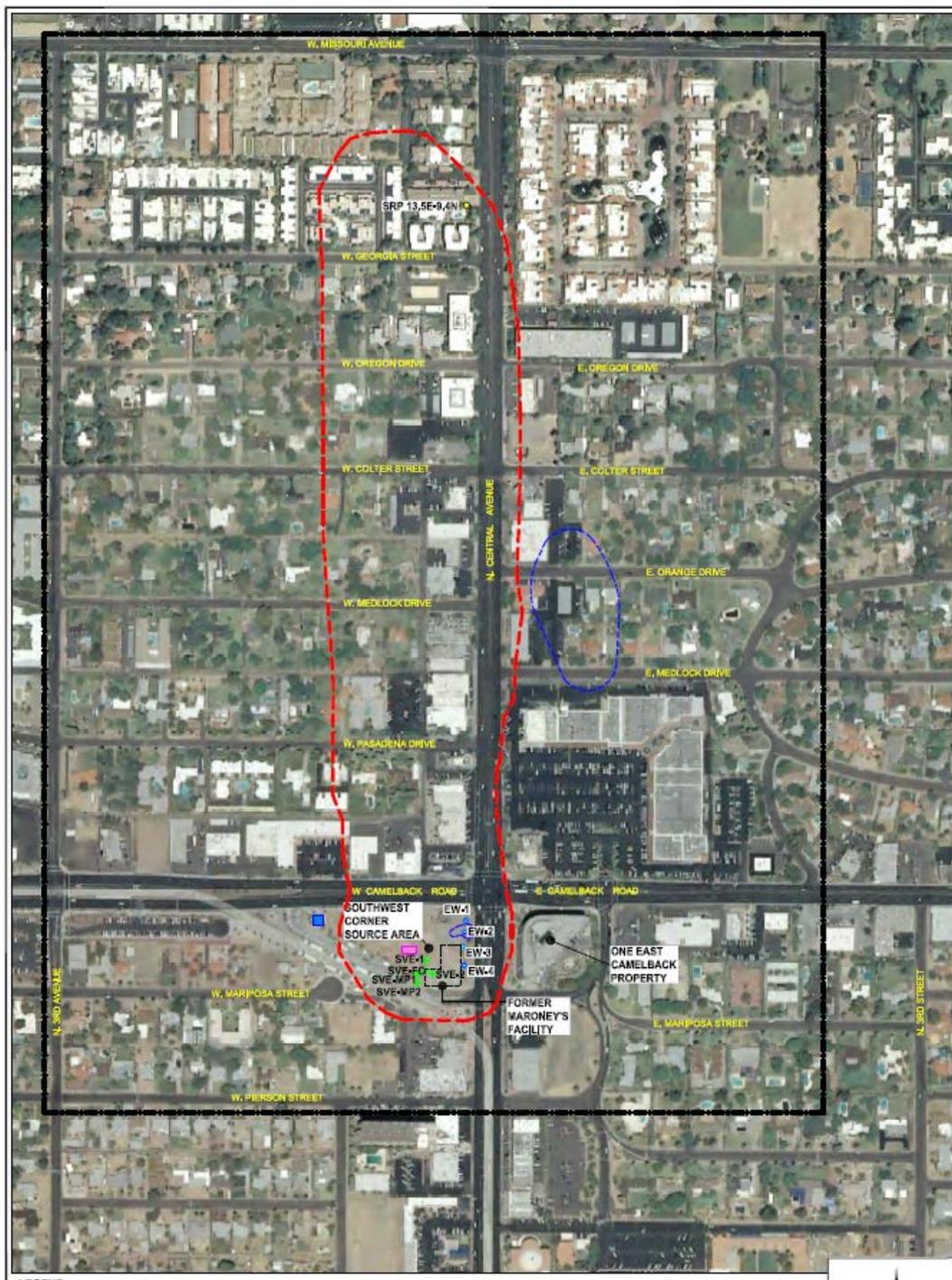


Events Since March 2015

CAB Meeting

- Completed the Remedial Investigation (RI) Report and the Feasibility Study (FS) Report.
- The groundwater system has removed 291.3 lbs. of PCE from water as of March 2015.
- The Soil Vapor Extraction (SVE) system has removed 6,545 lbs. of PCE from soil as of March 2015.
- Because of budget constraints groundwater samples were not collected from the groundwater monitor wells during April 2015.

Historic plume shape in red
current plume shape in blue.



Events Since March 2015

CAB Meeting (continued)

- Groundwater samples were collected from the extraction wells and groundwater treatment system quarterly and monthly, respectively. Vapor samples were collected from the SVE system monthly.
- The groundwater system has been fully operational but having problems with one of the well pumps.
- The SVE system has been fully operational.
- Groundwater treatment system and SVE system will continue to operate as presently funded.



Events Since March 2015

CAB Meeting (continued)

- ADEQ finalized the FS Report.
- Propose to continue to operate existing remediation systems.
- May add groundwater wells to site depending on migration of northern plume to the south.
- May take over One East Camelback (OEC) northern extraction wells if northern plume extends to extraction wells.
- As soil gas concentrations decline, will alter SVE system operation to maximize efficiency.
- Will conduct additional passive soil gas survey to compare with original survey and may add SVE extraction well pending results.



Analytical Results From Groundwater Treatment System Extraction Wells

- Currently only extraction wells CC-5 and EW-2 are operating and are sampled
 - Extraction Well EW-4 was shutdown on January 20, 2009
 - Extraction Well EW-3 was shutdown on May 6, 2009
 - Extraction Well EW-2 was shutdown on May 20, 2009 and restarted on October 29, 2009
 - Extraction Well EW-1 was shutdown on March 13, 2013

PCE Concentrations in Extraction Well Samples

Well Number	June 2014	September 2014	December 2014	February 2015	June 2015
CC-5	32	28	23	4.7	NS
EW-1	NS	NS	NS	NS	NS
EW-2	11	11	9.3	3.7	17
EW-3	NS	NS	NS	NS	NS
EW-4	NS	NS	NS	NS	NS



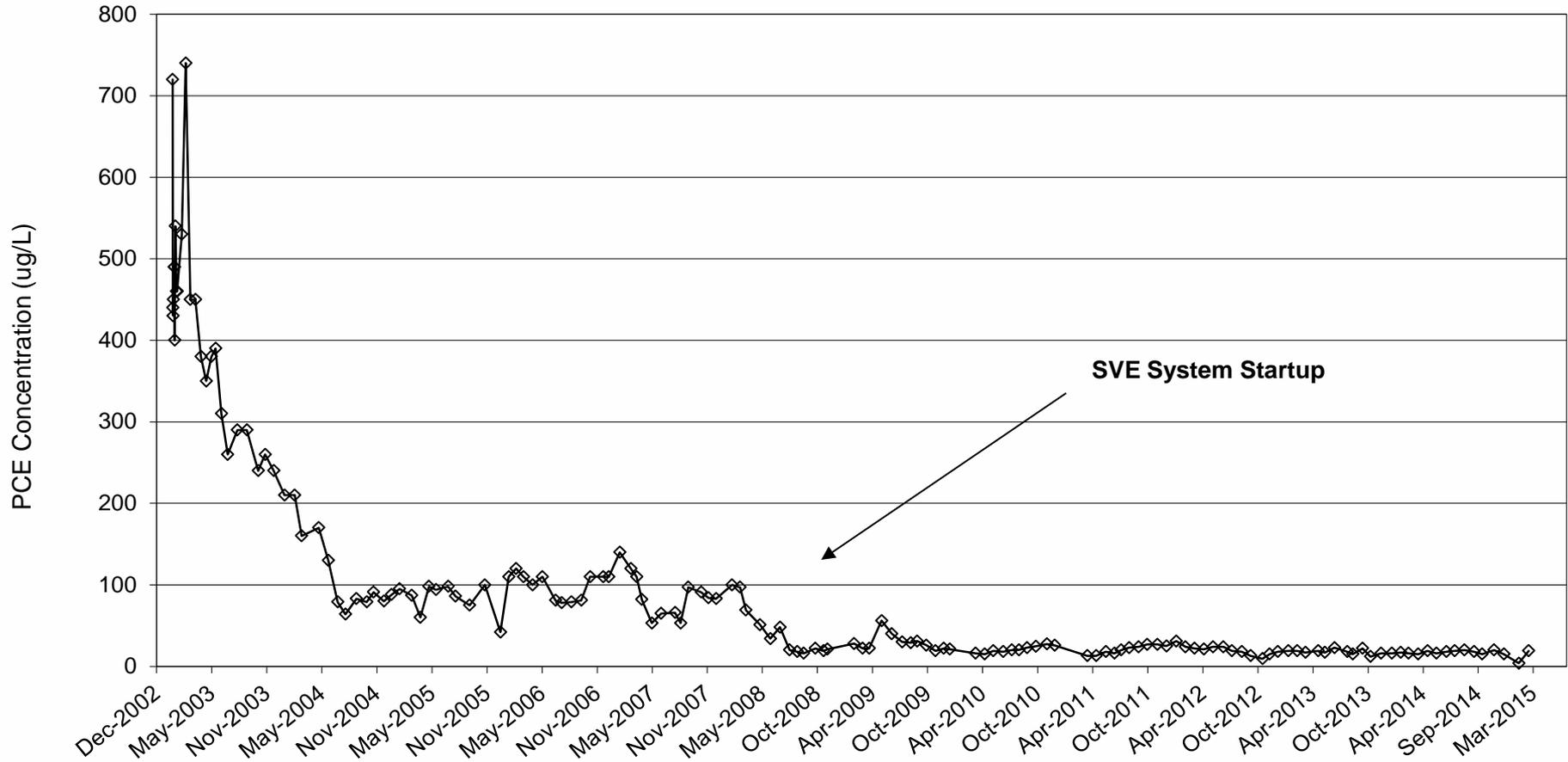
Operation & Maintenance Statistics for the GW Treatment System

Quarter	Gallons Treated	Percent Operational	VOC/PCE Removed (Lbs.)
2 nd Qtr 2014	5,836,010	100%	1.15/0.85
3 rd Qtr 2014	5,343,700	99.9%	1.16/0.89
4 th Qtr 2014	5,055,900	96.1%	0.98/0.70
1 st Qtr 2015	3,092,280	56.7%	0.49/0.34

Analyte	Range 1 st & 2 nd Quarter 2003	February 2015	March 2015	AWQS
Benzene	<0.50 – 0.54	<0.50	<0.50	5
Chloroform	1.8 – 2.8	3.5	3.1	100
PCE	350 - 740	3.8	19	5
TCE	9.7 – 16	0.42	1.9	5
Cis-1,2-DCE	8.5 - 20	<0.50	0.36	70

Concentrations in micrograms per liter (ug/L)

PCE Influent Concentration Changes With Time

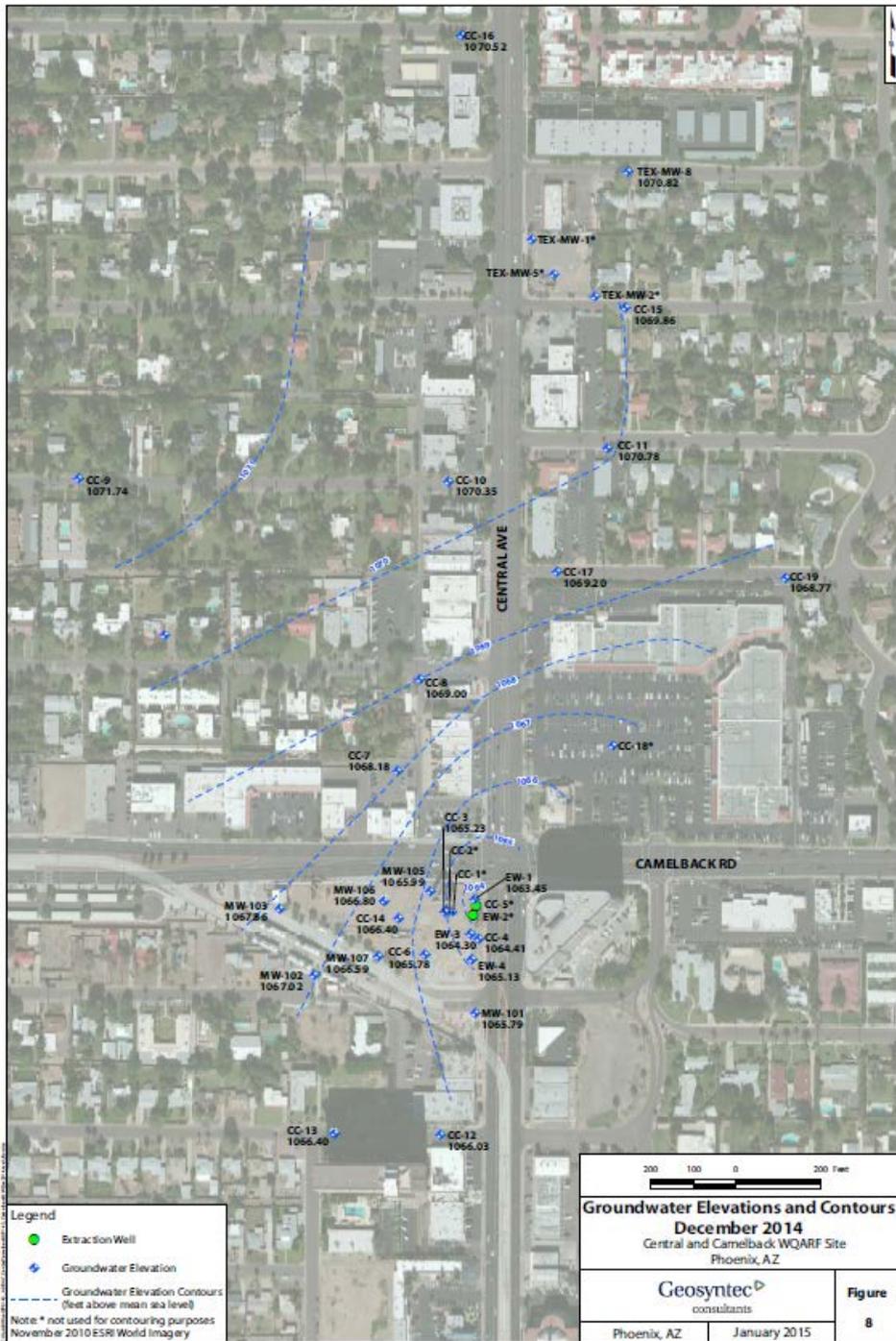


Notes:
AWQS = 5 ug/L



**PCE CONCENTRATIONS IN TOTAL
INFLUENT SAMPLES**





Plume
shape/location
changes over time.

-  Mid 1990s
-  Mid 2000s
-  Current
-  Future

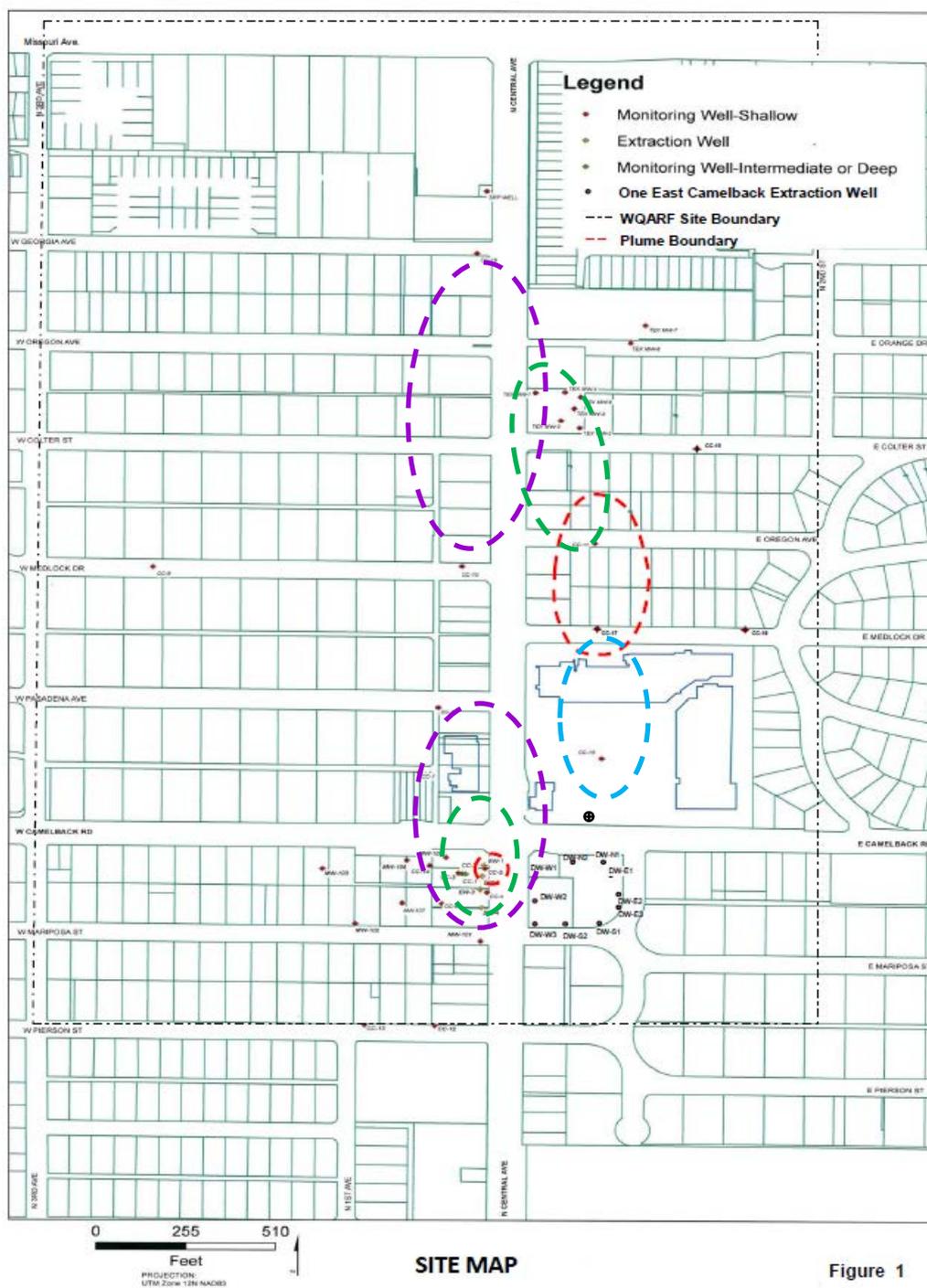


Figure 1

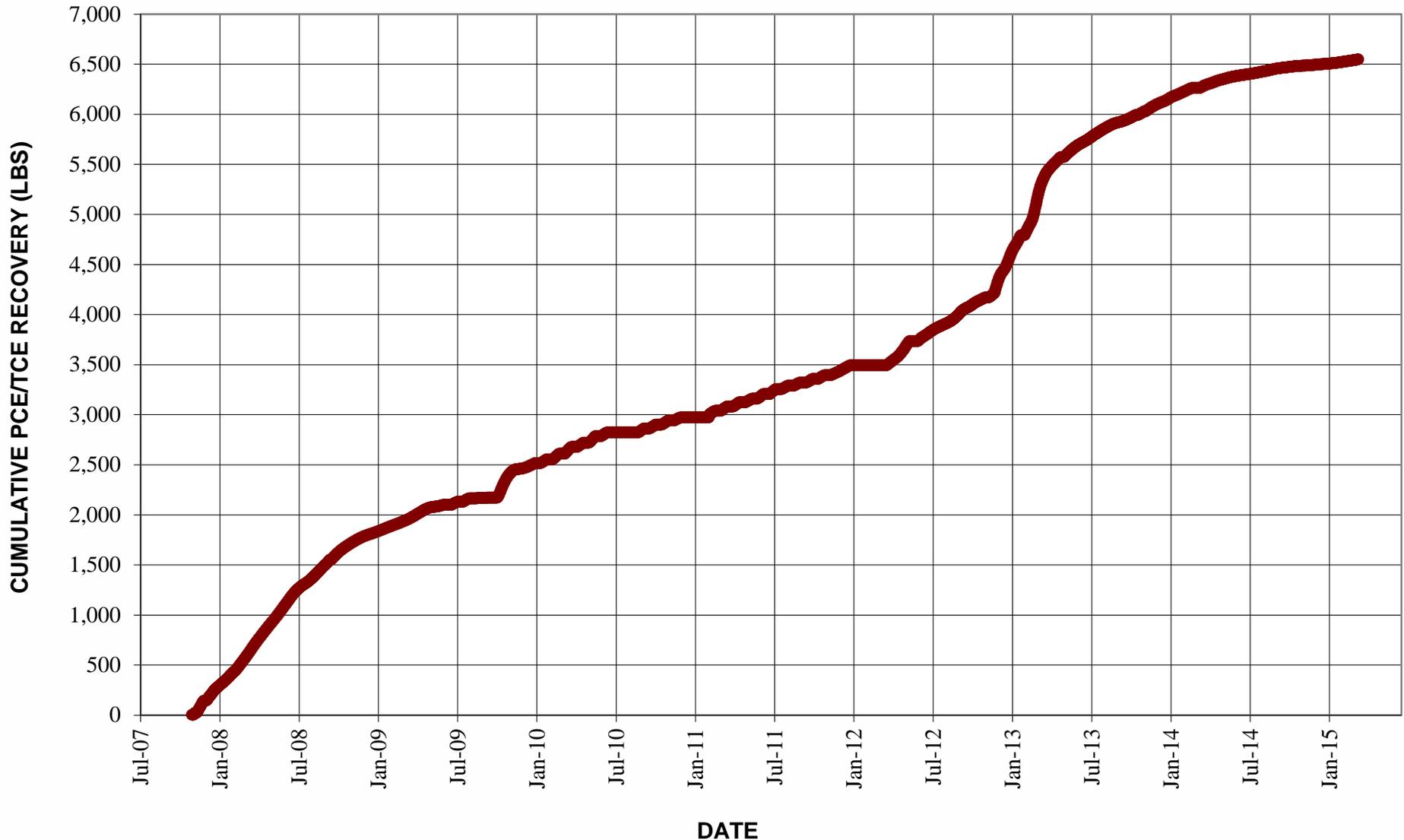
- During 1st Quarter 2015, the SVE system removed approximately 50.3 pounds of VOCS.
- Since SVE system startup in November 2007 to the end of March 2015 approximately 6,545 lbs. of VOCs.
- Quarterly performance tests continue to show that the system meets specifications as required by the air quality permit.

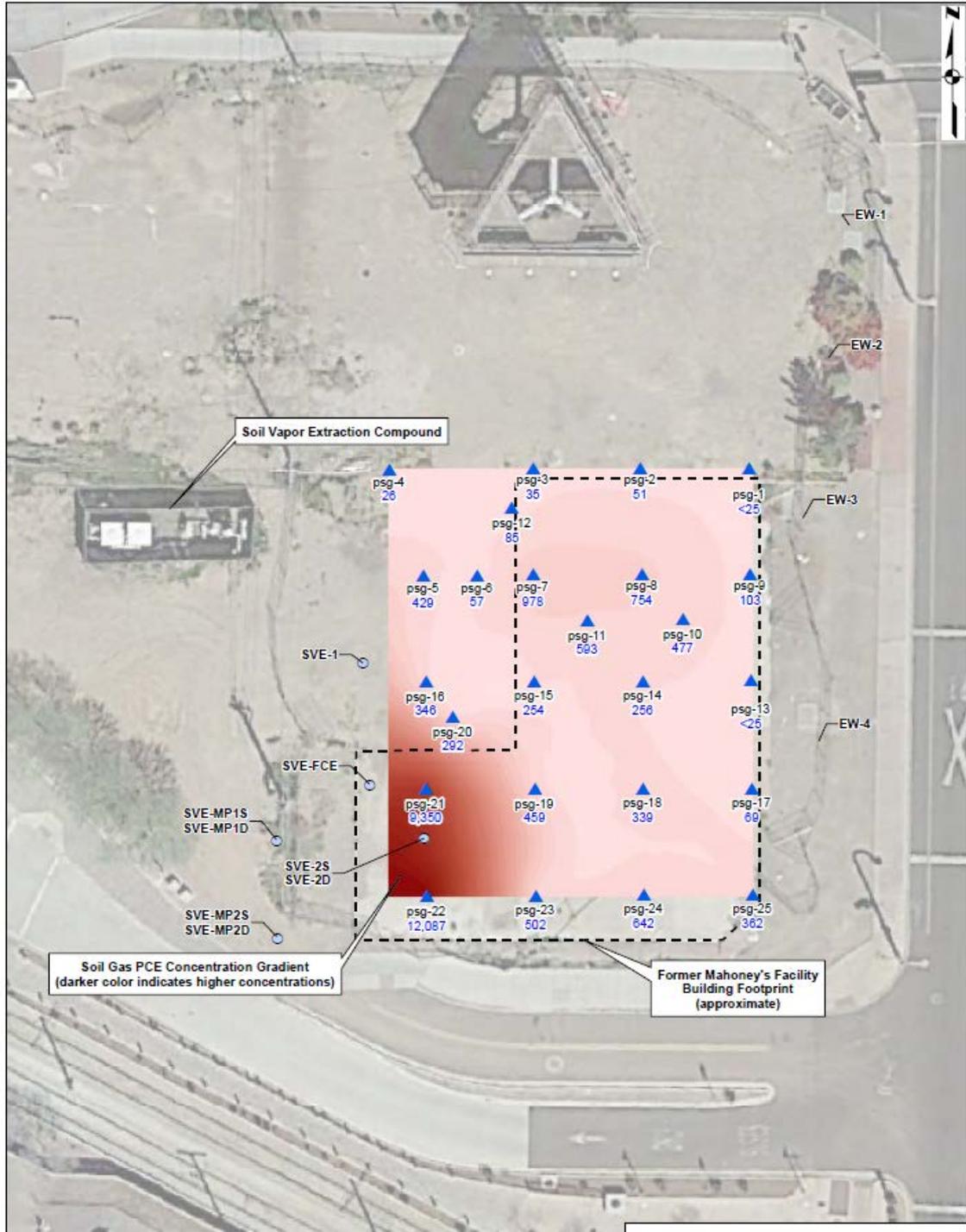


Operation & Maintenance Statistics for the (SVE) system

Quarter	Percent Operational	PCE/TCE Removed (Lbs.)
2 nd Qtr 2014	99.9%	125.7
3 rd Qtr 2014	100%	73.0
4 th Qtr 2014	100%	37.7
1 st Qtr 2015	100%	50.3

PCE Influent Concentration Changes With Time





- Prepare the Proposed Remedial Action Plan (PRAP) for the Site.
- Continue O&M activities for both SVE and GW systems.
- Monitor water levels quarterly and collect groundwater samples semiannually.



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