

**NOTICE OF PUBLIC INFORMATION
DEPARTMENT OF ENVIRONMENTAL QUALITY**

2017 WATER QUALITY ASSURANCE REVOLVING FUND REGISTRY

Pursuant to Arizona Revised Statute (A.R.S.) §49-287.01(D)(E), the Arizona Department of Environmental Quality (ADEQ) is providing this annual report of the location, remedial status and score of the sites on the Water Quality Assurance Revolving Fund (WQARF) Registry (Registry) as of September 1, 2017. The Registry includes those sites within the state that may pose risk to public health, welfare or the environment from the release of hazardous substances and for which there is current or planned investigation and cleanup. There are 37 sites on the Registry:

- 20 in Maricopa County,
- 9 in Pima County,
- 2 in Gila County,
- 1 in Graham County,
- 1 in Navajo County,
- 2 in Yavapai County
- 1 in Mohave County, and
- 1 in Yuma County

Sites on the Registry are scored based in part upon the type of contamination present, the location of the contamination and the number of people that may be affected. The maximum score a site may receive is 120. Scores are used to help determine relative risk from the site and do not necessarily mean that there is direct exposure of contaminants to humans or the environment. Whether the site is currently being remediated or investigated, ADEQ takes steps to identify the contamination and prevent exposure.

In 2017 ADEQ removed 3 sites from the WQARF Registry**:

- 2 in Maricopa
- 1 in La Paz

The Registry and additional information regarding these sites is available on the ADEQ web site at <http://www.azdeq.gov/node/337>. With 48-hour notice, an appointment to review related documentation is available Monday through Friday from 8:30 a.m. to 4:30 p.m. at ADEQ Records Management Center, 1110 West Washington Street in Phoenix. Please contact (602) 771-4380 to schedule an appointment to review documents.

7th Avenue and Bethany Home Road - This site was placed on the WQARF Registry on August 25, 2004 and has a score of 29. The site is located in Phoenix and is bounded by Maryland Avenue to the north, Bethany Home Road to the south, 5th Avenue to the east, 8th Avenue to the west and includes the 2.6-acre former shopping center east of 7th Avenue that housed a dry cleaning facility, as well as a former dry cleaner west of 7th Avenue. Contaminants of concern at the site include tetrachloroethene (PCE), trichloroethene (TCE) and vinyl chloride.

A soil vapor extraction (SVE) system operated from June 2005 through January 2006. Confirmation soil samples confirmed successful remediation to levels below ADEQ Soil Remediation Levels (SRLs) and Groundwater Protection Levels (GPLs).

ADEQ completed the final Remedial Investigation (RI) report in April 2011, the Feasibility Study (FS) work plan in May 2011 and the FS was completed in November 2012. The FS recommended enhanced reductive de-chlorination as the remedy for the site. An additional Early Response Action (ERA) was initiated and a pilot test for enhanced reductive de-chlorination began in March 2013. The pilot test was completed in March 2014 and the Proposed Remedial Action Plan (PRAP) was finalized in April 2015. In June 2016, the Record of Decision (ROD) was signed documenting the selection of in-situ enhanced reductive dechlorination (ERD) with monitored natural attenuation as the remedy for remediation of contaminants in groundwater at the Site. ERD injections commenced in November 2016. A Community Advisory Board (CAB) has been established for the site, was merged with the Central and Camelback CAB in 2013 and meets on a regular basis.

7th Street and Arizona Avenue - This site was placed on the WQARF Registry on April 27, 2000 and has a score of 40. The site is located in downtown Tucson, and is bounded approximately by Speedway Boulevard to the north, 8th Street and the railroad to the south, 4th Avenue to the east and Perry Avenue to the west. Contaminants of concern at the site include PCE, TCE, and cis-1,2-dichloroethene (cis-1,2-DCE).

ADEQ operated a SVE system from June 2006 to July 2009 as an ERA for the site and decommissioned the SVE in July 2009. Groundwater monitor wells verify that the regional aquifer has not been impacted. ADEQ completed the final RI and FS reports in 2014 and the draft PRAP in 2014. An additional source was added at 847 North Stone Avenue and the FS will be reevaluated. A CAB has been established for the site, merged with the Park-Euclid CAB in 2014 and meets on a regular basis.

7th Street and Missouri Avenue - This site was placed on the WQARF Registry on June 24, 2016 and has a score of 42. The site is located in Phoenix, and is bounded approximately by Bethany Home Road to the north, Georgia Avenue to the south, 6th Street to the west and 12th Street to the east. Contaminants of concern at the site include PCE and TCE.

PCE and TCE were initially detected in the late 1990's in groundwater samples collected as part of an underground storage tank assessment. Following this discovery, eight groundwater monitoring wells were installed during the preliminary investigation to assess the site.

In 2016, Fashion Cleaners entered into ADEQ's Voluntary Remediation Program (VRP) to address cleaning up their portion of the contamination. Sample results continue to show this site is separate

from the 7th Street and Missouri Avenue WQARF site. Groundwater and soil gas have been characterized and the draft RI is expected in June 2018. The site was added to the Central Phoenix CAB which meets on a regular basis.

16th Street and Camelback - This site was placed on the WQARF Registry on April 21, 1999 and has a score of 23. The site is located in Phoenix and is bounded approximately by Camelback Road to the north, Highland Avenue to the south, 17th Street to the east, and 15th Street to the west. The contaminant of concern at the site is PCE.

Based on the results of an ERA evaluation conducted in 2003, ADEQ determined that SVE was not a feasible remedy for the site. The RI and FS reports were finalized in 2015 and the PRAP in July 2016. In June 2017 ADEQ initiated enhanced reductive de-chlorination (ERD) injections to determine if clean up can be accelerated and is reviewing the results.

20th Street and Factor Avenue - This site was placed on the WQARF Registry on March 30, 2000 and has a score of 31. The site is located in Yuma and is bounded approximately by 17th Street to the north, 21st Street to the south, Kennedy Lane to the east and Fourth Avenue to the west. Contaminants of concern at the site include PCE, TCE, 1,1-dichloroethene (1,1-DCE), and cyanide.

In 2002, ADEQ conducted a soil removal action and cleaned out sumps and septic tanks at an active facility as part of an ERA. A soil vapor investigation was initiated in 2008. Vapor and groundwater monitoring is ongoing. No drinking water wells have been impacted. In February 2014, ADEQ completed the installation of a permanent asphalt-based engineered cap. The cap was placed over the cyanide impacted soils still remaining at a depth below one (1) foot at the site. The RI report was finalized in October 2014 and the FS report was completed in August 2016. The PRAP was completed in June 2017 and is awaiting final approval. A CAB has been established for this site and meets on a regular basis.

56th Street & Earll Drive - This site was placed on the WQARF Registry on June 2, 2004 and has a score of 40. The site is located in Phoenix and is bounded by Earll Drive to the north, Roosevelt Street to the south, 56th Street to the east, and 26th Street to the west. Contaminants of concern at the site include PCE and TCE.

The site originally was investigated as part of the Motorola 52nd Street NPL site. However, groundwater data indicate that the two TCE groundwater contaminant plumes are separate and distinct plumes and it was disassociated from the larger Motorola 52nd Street NPL site. ADEQ and a potentially responsible party signed an agreement in 2015 to remediate the site. A pump and treat groundwater system was constructed and started operation in November 2013 as part of an ERA. A draft RI report was submitted in November 2015 and will be finalized after additional characterization is completed in 2017. A CAB has been established for this site and meets on a regular basis.

Broadway-Pantano - This site was placed on the WQARF Registry on December 15, 1998 and has a score of 57. The site is located in the east-central part of Tucson and is bounded approximately by Speedway Boulevard to the north, Calle Madero to the south, Pantano Wash to the east, and Craycroft Road to the west. Contaminants of concern in groundwater include PCE, TCE and dross (arsenic, cadmium and lead).

The sources of the groundwater contamination are the former Broadway North and South Landfills. A groundwater containment system was installed in 2003 to prevent further westward migration of contaminated groundwater. This system was shut down in October 2012 due to low incoming groundwater contaminant concentrations. A SVE system was installed at the Broadway North Landfill in 2000 to remove and treat contaminated landfill gases contributing to the groundwater contamination. This system operated until 2002. The groundwater RI report was finalized in June 2012 and the landfill RI report was finalized February 2015. The FS was approved in June 2017 and the PRAP is expected June 2018. A CAB has been established for this site and meets on a regular basis.

Central Avenue and Camelback Road - This site was placed on the WQARF Registry on June 21, 2000 and has a score of 32. The boundaries of the site are approximately Georgia Avenue to the north, Mariposa Street to the south, 2nd Street to the east and 1st Avenue to the west. Contaminants of concern at the site include PCE, TCE and cis-1,2-DCE. Other contaminants present due to past releases from gasoline underground storage tanks in the area include benzene, toluene, ethylbenzene, total xylenes, methyl tertiary butyl ether (MTBE), and 1,2- dichloroethane (DCA).

In January 2003, as part of an ERA, ADEQ completed construction of a groundwater treatment system to remediate and control the migration of contaminated groundwater. In June 2004, ADEQ initiated an ERA evaluation of the Maroney's Drycleaner facility. A SVE system was installed in November 2007 and is currently in operation. Passive and active soil gas surveys were conducted in the vicinity of the former drycleaner's building and additional SVE wells were installed and added to the system. The RI and FS reports were finalized in 2015. The PRAP was prepared in 2017. A CAB has been established for this site, merged with the 7th Avenue and Bethany Home Road CAB and meets on a regular basis.

Cooper Road and Commerce Avenue - The site was listed on the WQARF Registry on June 14, 2004 and has a score of 33. The site is located in Gilbert, and the plume is bounded by Encinas Street to the north, Neely Ranch Preserve to the south, Golden Key Street to the east, and Horne Street/Dish Drive to the west. Contaminants of concern at the site in groundwater include PCE and TCE, arsenic, chromium, copper, cyanide, mercury and lead in the soil.

In 2001, groundwater samples collected from a Town of Gilbert monitoring well detected PCE concentrations above the AWQS. A Town of Gilbert public supply well is located nearby. Installation of off-site monitor wells began in 2003 and quarterly groundwater monitoring has been conducted at the site since March 2005. Construction and start up of a SVE/air sparging (AS) and groundwater pump and treat remediation system was completed in 2008; start-up of the AS component occurred in May 2009. The groundwater pump and treat system began continuous operations in August 2010. In 2015, the RI report was finalized and FS work plan approved. The FS

report is expected in January 2018. A CAB has been established for the site and meets on a regular basis.

East Central Phoenix (ECP) 24th Street and Grand Canal - This site was placed on the WQARF Registry on May 18, 2000 and has a score of 29. The site is located in Phoenix. The plume is bounded by Pinchot Avenue to the north, Oak Street to the south, 26th Street to the east and 16th Street to the west. The contaminant of concern at the site is PCE.

The RI began in 2007. As part of a prospective purchaser agreement CVS Pharmacy conducted a site investigation and installed monitoring wells. Additional monitoring and soil vapor wells have been installed since 2007. A SVE system was constructed and started operation in July 2016 as part of an ERA. Following completion of contaminant plume characterization in 2018, the RI report will be prepared. A CAB has been established for this site and meets on a regular basis.

ECP 32nd Street and Indian School - This site was placed on the WQARF Registry on May 18, 2000 and has a score of 29. The site is located in Phoenix. The plume is bounded by Indian School Road to the north, Interstate 10 to the south, 32nd Street to the east and 1st Street to the west. Contaminants of concern at the site include PCE.

In 2013, a SVE treatment system at the Maroney's dry cleaner began operating and in 2014 a SVE treatment system at the Former Viking dry cleaner began operations. A vapor intrusion indoor air assessment study also took place during the summer of 2013. Results indicated that the threat to residences was minimal and that no indoor mitigation systems were necessary. Contaminant plume characterization continues in order to prepare the RI report. A CAB has been established for this site and meets on a regular basis.

ECP 38th Street and Indian School Road - This site was placed on the WQARF Registry on September 21, 1998 and has a score of 20. The site is located in Phoenix. The plume is bounded by Indian School Road to the north, Piccadilly Road to the south, 38th Street to the east and 36th Street to the west. The contaminant of concern at the site is PCE.

ADEQ conducted an ERA installing a SVE system to remediate the source of PCE in the soil and groundwater. The system was started in 1994, operated intermittently and was decommissioned in March 2003. In 2014, additional groundwater monitor wells were installed. The RI report and FS work plan were finalized in 2015. Work to complete data gaps and the FS report continues. A CAB has been established for this site and meets on a regular basis.

ECP 40th Street and Indian School Road** - This site was placed on the WQARF Registry on September 21, 1998 and has a score of 20. The site is located in Phoenix. The plume is bounded by Devonshire Avenue to the north, Amelia Avenue to the south, 40th Street to the east and 38th Street to the west. Contaminants of concern at the site include PCE and TCE.

ADEQ conducted an ERA by installing a SVE/AS system to remediate the source of PCE in the soil and groundwater. The system was started in December 2004 and was shut down in June 2005. In

2014, additional groundwater monitor wells were installed. The RI report and FS work plan were finalized in 2015. The FS report was final in June 2017 which determined that contaminant concentrations no longer exceed standards. On May 29, 2017 ADEQ removed the site from the WQARF Registry.

ECP 40th Street and Osborn - This site was placed on the WQARF Registry on May 18, 2000 and has a score of 30. The site is located in Phoenix. The plume is bounded by Devonshire Avenue to the north, Amelia Avenue to the south, 40th Street to the east and 38th Street to the west. The contaminant of concern at the site is PCE.

In 2014, additional groundwater monitor wells were installed. Contaminant plume characterization continues in order to prepare the RI report. A CAB has been established for this site and meets on a regular basis.

ECP 48th Street and Indian School Road - This site was placed on the WQARF Registry on March 26, 1999 and has a score of 27. The site is located in Phoenix. The plume is bounded by Devonshire Avenue to the north, Fairmont Avenue to the south, 48th Street to the east and 45th Place to the west. The contaminant of concern at the site is PCE.

ADEQ and SRP entered into an agreement to conduct a source control interim remedial action (IRA) in 2004. SRP constructed a SVE system to remediate the source of PCE in soil. The system was removed by SRP in 2012 due to low concentrations.

A vapor intrusion indoor air assessment study took place during the summer of 2013. Results indicated that no indoor air mitigation systems were necessary. Recent result indicate the plume has migrated. Contaminant plume characterization continues in order to prepare the RI report. A CAB has been established for this site and meets on a regular basis.

Estes Landfill - This site was placed on the WQARF Registry on April 28, 1998 and has a score of 45. The site is located in Phoenix, south of Sky Harbor Airport and is bounded approximately by the Salt River to the north, Magnolia Street to the south, State Route 153 to the east, and 40th Street to the west. Contaminants of concern at the site include vinyl chloride, cis-1,2-DCE and TCE in groundwater and lead, arsenic and thallium in soil.

The RI and FS reports has been completed and since the PRAP was initially completed in 2002, the final proposed remedy for the Site has been changed. It was concluded that the source of the groundwater contamination is the former liquid waste disposal pit and not the current soil covered landfill. There is no indication that the current landfill is impacting groundwater quality. ADEQ finalized a revised PRAP in 2015 and the ROD for Monitored Natural Attenuation was signed in 2017.

Harrison Road and Millar Road Dross – This site was placed on the WQARF Registry on April 3, 2017 and has a score of 40. The site is located in Tucson. The site is bounded approximately by Millmar Road to the north, Mountain View to the south, the private driveway of 9880 Millar Road to

the east and Harrison Hills wash to the west. The contaminant of concern is aluminum dross which is a byproduct of aluminum scrap meltdown and consists of a gray ash-like substance interspersed with metal pieces. Dross often contains heavy metals. The metals detected at this site over regulatory standards for soil are aluminum, antimony, arsenic, cadmium, copper, lead and nickel.

In 2015 preliminary investigation sample results indicated the site was contaminated with heavy metals above soil remediation levels (SRLs). Dross was also observed in the transient Harrison Hills wash which discharges to the Pantano Wash. Groundwater at the site is not impacted. In August 2016 an ERA was conducted to remove contaminated soil near a residence and near the wash, remove observable dross materials from the wash, and add a temporary cap over the majority of a large dross pile. In April 2017 additional work was done to decrease the overall area of the large pile and design a permanent cover. All clean-up activities were completed within 180 days of WQARF listing.

Highway 260 and Johnson Lane - This site was placed on the WQARF Registry on June 24, 2016 and has a score of 40. The site is located in the Lakeside portion of Pinetop-Lakeside, and is generally bounded by the Jackson Lane alignment to the north, by the east-west alignment of West White Mountain Boulevard (State Route Highway 260) and Burke Lane to the south, by the Blue Ridge Unified School District property and Billy Creek to the east, and by the Neils Hanson Lane alignment to the west. Contaminants of concern at the site include PCE and TCE.

During groundwater sampling as part of a Preliminary Investigation in 2015, PCE and TCE were detected in private wells. ADEQ is currently conducting a Remedial Investigation that includes assisting private wells owners who have impacted wells and evaluating options to address potential health risks. A CAB has been established for this site and meets on a regular basis.

Highway 260 and Main Street- This site was placed on the WQARF Registry on December 16, 2016 and has a score of 40. The site is located in the vicinity of the intersection of Highway 260 and Main Street in Cottonwood. The site is generally bounded to the north by Mingus Avenue, to the south by Mongini Lane, to the west by South 15th Street and to the east by the Verde River. Contaminants of concern at the site include PCE, TCE, and cis-1,2-DCE.

During groundwater sampling as part of a Preliminary Investigation, PCE, TCE, and cis-1,2-DCE have been detected in private wells and soil borings. ADEQ is currently conducting an Remedial Investigation that includes assisting private well owners who have impacted wells and evaluating options to address potential health risks. A CAB was not formed at this site due to low participation.

Klondyke Tailings Project - This site was placed on the WQARF Registry on September 28, 1998 and has a score of 69. The site is located approximately two (2) miles north of the town of Klondyke in Section 6, Township 7 South, Range 20 East. The site boundaries are irregular and defined by the extent of the soil contamination above the residential SRL for lead of 400 milligrams per kilogram (mg/kg). The current contaminants of concern in the soil include antimony, arsenic, cadmium, copper, lead, manganese, mercury, vanadium and zinc.

Sampling to determine the extent of off-site soil contamination began in 2006. To date, approximately 2,500 soil samples have been collected from the site and adjacent properties. The limits of the 400 mg/kg residential soil remediation level for lead have been defined to extend approximately 0.50 miles from the site and impact nine (9) properties within the site.

In June 2008, erosion protection installation was completed on the upper tailings pile and the clean soil cap was seeded. In June 2012, EPA initiated the removal of contaminated soils from two properties. An additional 1,040 cubic yards of contaminated soil was removed in October 2013 from a third property. In 2014, the final RI was completed and in February 2015 the FS work plan was approved. In 2016 ADEQ removed 2380 cubic yards of contaminated soils from Klondyke Road and two residential properties. In May 2017 ADEQ issued the FS and the PRAP was issued in June 2017. The ROD is expected to be completed in 2018. A CAB has been established for the site and meets on a regular basis.

Los Reales Landfill - This site was placed on the WQARF Registry on April 23, 1999 and has a score of 32. The site is an active municipal sanitary landfill located in southeast Tucson and has been in operation since 1967. Contaminants of concern at the site include PCE and TCE.

The City of Tucson has implemented a groundwater pump and treat system as required by a 1995 remedial action plan. In 2013, the City submitted to ADEQ a PRAP modification of transitioning to “groundwater sampling only” based on continued plume stability (apparent natural attenuation). Wells were installed in 2015 as part of the data collection to finalize the remedial action plan. COT will collect two years of data and then perform additional modeling to support the RAP modification. If the modeling results are supportive, COT will finalize the RAP modification proposal and submit that to ADEQ for review/approval

Miller Valley and Hillside Avenue – The site was placed on the WQARF Registry on December 12, 2016 and has a score of 40. The site is located in Prescott. The site is bounded by Merritt Avenue alignment to the north, Miller Creek to the south, Division Street to the east and Miller Creek and Valley Street to the west. Contaminants of concern are PCE and TCE.

In 2002 an investigation for a petroleum leaking underground storage tank detected PCE and TCE. In 2005, further investigation found soil gas contamination above the EPA regional screening levels and groundwater contamination above the AWQS; two private wells used for irrigation were impacted by PCE. In 2015 and 2016 sampling indicated the groundwater concentrations were still above AWQS. A CAB was not formed at this site due to low initial community participation. In 2017 a Remedial Investigation has been implemented and additional private wells in the area were sampled; no other wells except the two previously impacted private irrigation wells contained PCE or TCE above AWQS.

Miracle Mile Area - This site was placed on the WQARF Registry on September 18, 1998 and has a score of 62. The site is located in Tucson and is bounded approximately by Ruthrauff Road to the north, Prince Road to the south, Pomona Road to the east, and La Cholla Boulevard to the west. Contaminants of concern at the site include TCE and chromium.

The local water provider is operating an ADEQ-funded wellhead treatment system as an ERA to remove TCE. In June 2013, the final RI report was issued and the FS was initiated. Starting in 2016 data gaps were being addressed in the FS and a draft FS Report is expected in 2018. A CAB has been established for this site and meets on a regular basis.

Park-Euclid - This site was placed on the WQARF Registry on April 23, 1999 and has a score of 51. The site is in Tucson and is approximately bounded by 9th Street to the north, 14th Street to the south, Highland Avenue to the east, and Park Avenue to the west. Contaminants of concern at the site include PCE, TCE, vinyl chloride and cis-1,2-DCE.

ADEQ negotiated an Agreement to Conduct Work with potentially responsible parties Mission Linen and Haskell Linen (Park-Euclid Working Group) in 2010. In November 2011, ADEQ completed the final RI report. The Park-Euclid Working Group submitted a FS work plan in June 2013 and the final FS Report was approved in November 2017. The Park-Euclid Working Group is currently preparing a PRAP. A CAB has been established for this site, merged with the 7th Street and Arizona Avenue CAB, and meets on a regular basis.

Payson PCE - This site was placed on the WQARF Registry on April 29, 1998 and has a score of 63. The site is located in Payson and the plume is bounded approximately by Main Street to the north, Cedar Lane to the south, Beeline Highway (State Route 87) to the east, and McLane Road to the west. The contaminant of concern in the groundwater at the site is PCE.

Two (2) groundwater treatment systems have been constructed. An Interim Groundwater Treatment System (IGTS) was constructed to remediate the contamination in the source area. The IGTS operated from October 1998 to January 2003 and was decommissioned in July 2013. An Expanded Groundwater Treatment System (EGTS) began operation in October 1998 and continues to operate treating contaminated water and preventing the contamination plume from migrating further. Treated water from the EGTS is delivered to the Town of Payson drinking water system.

ADEQ completed the ROD in June 2007. Groundwater monitoring takes place twice per year. In December 2015, Enhanced Reductive Dechlorination (ERD) began implementation and is expected to reduce the time for completion of the overall remedy. In 2017, results from the ERD method show a reduction in concentrations, and the site will be reviewed for possible closure in 2018.

Pinal Creek - This site was placed on the WQARF Registry on October 23, 1998 and has a score of 97. The site is located in Gila County in and around the cities of Globe, Town of Miami, and the communities of Claypool and Wheatfield. The site includes the BHP Copper and Freeport McMoRan (formerly Phelps Dodge) Miami mining properties, and the drainages and underlying aquifers of Miami Wash, Bloody Tanks Wash, Russell Gulch, and Pinal Creek. The site also includes the entire floodplain of Pinal Creek from the Old Dominion Mine to the Salt River, plus those portions of the communities underlain by contaminated groundwater. Contaminants of concern in groundwater at the site include heavy metals such as aluminum, iron, manganese, copper, cobalt, nickel, zinc, cadmium, and other contaminants such as sulfate, acidity, and dissolved solids.

Localized soil and stream sediment contamination are being investigated; contaminants of concern include arsenic, lead, copper, cadmium, manganese, nickel, and zinc.

The Pinal Creek Group (PCG), which previously consisted of BHP, Freeport McMoRan and Inspiration Copper, have conducted remedial actions including source control since 1988. PCG also completed a RI, risk assessments, FS, recommended remedial action plan and a well replacement program for contaminated private and public supply wells. The PCG has conducted groundwater extraction and treatment from the alluvial and the regional aquifers since 1988 and it continues to this day. In March of 2010, the Pinal Creek Group was dissolved and Freeport-McMoRan Miami Inc. (FMMI)'s Pinal Creek Project (PCP) became the sole owner/operator of the Pinal Creek treatment system. BHP Copper is no longer a part of the PCG, though they remain responsible for management of their properties and source control in accordance with the governing Consent Decree. In Kiser Basin, water is now being injected to improve metals recovery. To speed up aquifer restoration, groundwater remedy optimization pilot tests have been conducted by the PCP near the source area in Bloody Tanks Wash. A Decision Record for the Pinal Creek treatment System is currently being prepared in conjunction with FMMI and is scheduled for completion in 2018.

Shannon Road/El Camino del Cerro - The El Camino del Cerro site was placed on the WQARF Registry on August 18, 1998 and has a score of 71. The Shannon Road-Rillito Creek site was placed on the WQARF Registry on April 23, 1999 and has a score of 53. The El Camino del Cerro WQARF site and Shannon Road-Rillito Creek WQARF site were administratively combined into one site on January 2005.

This combined site is located in northwest Tucson and is bounded approximately ¼ mile north of the Rillito Creek to the north, El Camino del Cerro Road on the south, Meadowbrook Park on the east, the Santa Cruz River on the west. The site consists of industrial and residential properties, and a former landfill which occupies approximately twenty (20) acres in the southwest portion of the site. Contaminants of concern in groundwater at the site include PCE, TCE, 1,1-DCE, 1,1-DCA, vinyl chloride, and benzene.

The contaminant plume has impacted three (3) community wells, two of which were removed from service. One (1) of these wells now has a wellhead treatment system capturing the plume and removing VOCs to meet drinking water standards. The RI report and FS work plan were approved in 2015. The FS report was finalized in 2016 and the PRAP is anticipated in 2018. A CAB has been established for the site and meets on a regular basis.

Silverbell Jail Annex Landfill - This site was placed on the WQARF Registry on April 23, 1999 and has a score of 51. The site is located at 3200 North Silverbell Road in northwest Tucson. The site is bounded approximately by Sweetwater Drive on the north, Grant Road/Ironwood Hills Drive on the south, Interstate 10 on the east, and Silverbell Road on the west. Contaminants of concern at the site include PCE, TCE, cis-1,2-DCE and vinyl chloride.

In 2001, the City of Tucson began operation of a full-scale SVE system to remove and treat contaminated VOC landfill gases contributing to the groundwater contamination. In April 2008, the system was shut down and the equipment was removed.

In 2010, the City of Tucson proposed to install a pump-treat-inject system to address the highest VOC concentrations. ADEQ, the City of Tucson meet periodically to coordinate sampling and cleanup of the site. As of 2017, ADEQ is awaiting the remediation system design from the City of Tucson. The City of Tucson continues to conduct groundwater and soil vapor (methane) monitoring.

South Mesa - This site was placed on the WQARF Registry on August 18, 1998 and has a score of 26. The site is located in Gilbert and is bounded approximately by Baseline Road to the north, Melody Drive to the south, Hobson Street to the east, and McQueen Road to the west. The contaminant of concern at the site is PCE, TCE and DCE.

Two (2) remedial action projects at the site have significantly reduced the contamination by treating pumped groundwater and extracting vapors from the soil. ADEQ began an ERA in June 2004 to address the remaining subsurface contamination. The SVE system was shut down in November 2007 and was removed from the site in June 2008.

The RI, and FS reports have been completed. The PRAP was completed in November 2014. In June 2016, the ROD was signed documenting the selection of groundwater monitoring, with wellhead treatment as a contingency, as the remedy.

Stone Avenue and Grant Road - This site was placed on the WQARF Registry on January 20, 2017 with a score of 45. The site is located in Tucson. The site is bounded approximately by East Alturas Street to the north, East Sahuaro Street to the south, North Estrella Avenue to the east, and North Castro Avenue to the west. The site includes a mixture of public, commercial and residential land uses near Grant Road.

During a Phase II investigation by the City of Tucson in December 2014, PCE was detected in four sub-slab soil-gas samples beneath the source area. In June 2015, a leaking underground storage tank (LUST) site located immediately north of the Site found PCE and TCE above AWQSS in groundwater. ADEQ completed a Preliminary Investigation of the site in February 2016 and the RI began in July 2017. An ERA consisting of a SVE system that provides combined vapor intrusion mitigation and source reduction was started in November 2017. The site was added to the Park Euclid/7th and Arizona Avenue CAB which meets on a regular basis.

Tyson Wash** - This site was placed on the WQARF Registry on December 14, 1998 and has a score of 46. The site is located in the Town of Quartzsite and the contaminated groundwater plume is bounded by Sunset Street to the north, Oregon Avenue to the west, Main Street (Business I-10) to the south, and Central Boulevard (SR-95) to the east. The known groundwater contamination exists northwest of the intersection of State Highway 95 and Business Route I-10 in Quartzsite. Contaminants of concern at the site include PCE and TCE.

As part of an ERA, a groundwater treatment system was constructed in 2003 to reduce contaminant concentrations in the aquifer and prevent migration of the plume to private drinking water wells. The RI, FS and PRAP have been completed. The ROD was completed in June 2009. The site is in

the Operation and Maintenance (O&M) phase. A full scale In-Situ Chemical Oxidation (ISCO) system began operations in June 2014. In February 2017 results showed a reduction in concentrations below standards. On May 29, 2017 ADEQ removed the site from the WQARF Registry.

Vulture Mill - This site was placed on the WQARF Registry on April 28, 1998, and has a score of 65. The site is located just east of U.S. Route 89/93 about one (1) mile northwest of the center of the Town of Wickenburg. The eastern boundary of the site is approximately 0.25 miles west of the Hassayampa River. Contaminants of concern at the site include lead and arsenic.

The ROD was signed in September 1999. ADEQ has implemented the remedy, which consists of excavation of contaminated soil, placement in a consolidation pile, installation of a clean soil cover, and planting of vegetation to control erosion. Presently, the site is used as pasture and inspected annually. The last inspection occurred in 2017. Negotiations with the owner to place a Declaration of Environmental Restriction on the property and remove the site from the Registry continues.

West Central Phoenix (WCP) - East Grand Avenue - This site was placed on the WQARF Registry on April 15, 1998 and has a score of 31. The site is located in Phoenix and is bounded approximately by SRP Grand Canal to the north, Thomas Road to the south, 29th Avenue to the east, and 33th Avenue to the west. Contaminants of concern are PCE and TCE.

Field investigative activities were completed in December 2001 and the RI report has been completed. In 2004, a working party constructed and operated a SVE system at the former Van Waters & Rogers facility. In September 2013, the SVE system was shut down. The working party is in the process of completing the FS and has implemented groundwater monitoring. A CAB has been established for this site.

WCP North Canal Plume - This site was placed on the WQARF Registry on April 15, 1998 and has a score of 22. The site is located in Phoenix and is bounded approximately by Indian School Road on the north, West Flower Street on the south, Grand Avenue on the east and 40th Avenue on the west. Contaminants of concern at the site include PCE, TCE, DCE and chromium.

The 2005, ADEQ conducted an ERA evaluation. In 2013 and 2014, as part of the remedial investigation, a passive soil gas survey on 33rd Avenue was completed. The final RI report is anticipated in 2017. A CAB has been established for this site.

WCP North Plume - This site was placed on the WQARF Registry on April 15, 1998 and has a score of 55. The site is located in Phoenix and is bounded approximately by Highland Avenue to the north, Indian School Road to the south, 37th Avenue to the east, and 43rd Avenue to the west. Contaminants of concern at the site include PCE and TCE.

A SVE system was installed at the F&B facility as part of an ERA. The SVE system has been updated to improve operation. Further evaluations are being conducted to address groundwater contamination.

Through a working party agreement, a SVE system was operated at the Hill Brothers Chemical Company. A No Further Action (NFA) determination was issued for this facility following confirmation sampling and a public notice for review.

The RI, RO and FS reports are complete. The PRAP consisting of ERD with continued SVE system operation, was completed in June 2017. A CAB has been established for this site.

WCP West Grand Avenue** - This site was placed on the WQARF Registry on April 21, 1998 and has a score of 17. The site is located in Phoenix and is bounded approximately by Osborn Road to the north, Earll Drive to the south, 33rd Avenue to the east, and 35th Avenue to the west. The contaminant of concern at the site is TCE.

The FS report was completed in June 2013 and the PRAP in February 2014. In June 2016, the ROD was signed documenting the selection of groundwater monitoring and sampling that would confirm completion of MNA as the remedy. On May 29, 2017, ADEQ removed the site from the WQARF Registry.

WCP West Osborn Complex - This site was placed on the WQARF Registry on August 11, 1998 and has a score of 47. The site is located in Phoenix and is bounded approximately by the Grand Canal to the north, Van Buren Street to the south, 33rd Avenue to the east, and 55th Avenue to the west. Contaminants of concern at the site include TCE and PCE.

The RI report has been completed. FS reports for the deep and shallow plumes for the project site have been approved. PRAPs were completed for the deep and shallow plumes and are still under review and revision given new site information about a possible new source. Additional groundwater sampling is scheduled for 2018 and an SVE system ERA has been installed at the new source. A CAB has been established for this site.

West Van Buren - This site was placed on the WQARF Registry on April 10, 1998 and has a score of 50. The site is located in Phoenix and is bounded approximately by McDowell Road to the north, Lower Buckeye Road to the south, Seventh Avenue to the east, and 75th Avenue to the west. In addition, a finger shaped plume exists from approximately West Buckeye Road and South 41st Avenue to West Watkins Street and South 11th Avenue. Contaminants of concern at the site include PCE, TCE, 1,1,1-trichloroethane (1,1-TCA), 1,1-DCA, 1,1-DCE, cis-1,2-DCE, and chromium.

Several source properties have had ERA's completed or have been working under cooperative agreement or consent order to conduct investigative and/or remediation work. These include but are not limited to:

- Air Liquide USA, LLC and Air Liquide America Specialty Gases, LLC (Air Liquide)
- American Linen Supply Company (ALSCo)
- ChemResearch Company Incorporated (ChemResearch)
- Dolphin Incorporated (Dolphin)
- Prudential Overall Supply (Prudential)
- Reynolds Metals Company (Reynolds)
- Van Waters and Rogers Incorporated (VW&R)

Roosevelt Irrigation District (RID) submitted an ERA plan which was conditionally approved on June 24, 2010. RID submitted a modified ERA plan which was approved on February 1, 2013. RID installed liquid-phase granular activated carbon wellhead treatment systems on four (4) of RID's wells within the West Van Buren Area plume.

ADEQ finalized the RI report for WVBA in August 2012. RID and the West Van Buren Working Group (WVBWG), under working agreements with ADEQ, submitted separate FS work plans in July 2013 and FS reports in July 2014.

In 2017 ADEQ sampled the far western toe of the groundwater plume near the city of Tolleson. The existing well network and groundwater concentrations are being evaluated for focused future sampling efforts. Strategies for the PRAP are currently being developed. A CAB has been formed for this site but has not met since 2015.

Western Avenue Plume - This site was placed on the WQARF Registry on December 15, 1998 and has a score of 51. The site is located in Avondale and Goodyear and is bounded approximately by San Xavier Boulevard to the north, State Route 85 to the south, 3rd Street to the east and Phoenix Goodyear Airport to the west. The contaminant of concern at the site is PCE.

The final RI report and FS were completed in May 2009 and November 2013, respectively. The PRAP was completed in April 2014. The existing PCE is in the shallow subunit and being captured by the Phoenix Goodyear Airport South (PGA-S) extraction wells. A ROD is currently being prepared in conjunction with PGA-S and is planned to be issued in 2018. The CAB has been formally disbanded with the approval of the PRAP, however a Community Advisory Group (CAG) continues to meet under direction from EPA.