Miracle Mile
Water Quality Assurance Revolving Fund (WQARF) site
Community Involvement Plan

Flowing Wells Irrigation District Water Treatment System
# TABLE OF CONTENTS

**Introduction**
- CIP Purpose 3
- WQARF Process 3
- ADEQ Spokesperson Contact Information 4
- Site Information Repository 4

**Site Overview** 5

**Community Profile**
- Community Involvement Area (CIA) 7
- Community Demographics 8

**Community Issues and Concerns**
- Summary of Community Issues 10
- Community Concerns 10
- Outreach Recommendations 10

**Community Involvement Action Plan**
- Community Involvement Action Summary - Required Activities 11
- Community Involvement Techniques 17

**APPENDICES** 21

Appendix A  WQARF Process Chart 22
Appendix B  Site History 23
Appendix C  Targeted Communities 26
Appendix D  Elected Officials 28
Appendix E  Community Advisory Board 29
Appendix F  Media Outlets 30
Appendix G  Local and State Agencies 33
Appendix H  Prospective Purchaser Agreements 34
Appendix I  Consent Orders and Settlements 35

**Acronyms and Glossary of Terms** 36

**Disclaimer:** All telephone numbers, email addresses, and contact names are subject to change after the date of this publication.
Introduction

CIP Purpose

The Arizona Department of Environmental Quality (ADEQ) is committed to involving communities in the Water Quality Assurance Revolving Fund (WQARF) site investigation and cleanup process.

The Miracle Mile WQARF site community involvement plan (CIP) describes how ADEQ will fulfill this commitment. ADEQ will regularly update this plan based on site-specific developments, public comments and community concerns. ADEQ welcomes community input on this CIP.

WQARF Process

The goal of the WQARF process is to clean up sites with groundwater and/or soil contamination, to protect human health and the environment. Created under the Environmental Quality Act of 1986, WQARF receives funding from legislative appropriations, cost recovery from responsible parties, and special fees.

The WQARF program identifies contaminated sites in significant need of remediation. WQARF Registry sites are assigned an Eligibility and Evaluation (E&E) score based on several factors, such as the nature and extent of contamination and the number of people who may be exposed to the contaminants. The E&E score does not necessarily mean that the site poses a direct risk to human health and/or the environment.

The WQARF process uses a step-by-step approach to thoroughly investigate contaminated sites. ADEQ uses data from the investigation to develop a site-specific cleanup strategy, also called the site’s remedy.

The flowchart in Appendix A depicts each phase in the WQARF process. Refer to the glossary for definitions of each WQARF phase.
ADEQ Spokesperson Contact Information

The ADEQ designated spokesperson will act as liaison between ADEQ and the community. The spokesperson will provide notice of public meetings, plan Community Advisory Board meetings, and ensure that CIP requirements are followed. Contact information for the designated spokesperson for this WQARF site is below:

Community Involvement Coordinator ADEQ

1110 West Washington Street, 6th Floor
Phoenix, AZ 85007
602-771-4410 or 800-234-5677
Email: Flood.Wendy@azdeq.gov
Fax: 602-771-4272

View Community Involvement Contacts Online:
http://www.azdeq.gov/WQARF

Site Information Repository

The Miracle Mile WQARF site information repository contains site-related documents, such as technical reports, public notices, and this CIP. ADEQ will continue to add site-related documents to the site information repository as they are completed. The site information repository is available online and in person:

Online:
azdeq.gov/node/1012

In Person
ADEQ Records Center
1110 West Washington Street
Phoenix, AZ 85007
602-771-4380 or 800-234-5677
(Please call to make an appointment)

To make alternative arrangements to review documents in person at a location nearest you, contact the ADEQ Community Involvement Coordinator.
Site Overview

The Miracle Mile WQARF Site is located in Tucson, Arizona. The site was placed on the WQARF Registry in September 1998, with an eligibility and evaluation (E&E) score of 62 out of a possible 120. The major factor leading to the score was the presence of volatile organic compounds (VOCs) and chromium in groundwater at levels exceeding Arizona Aquifer Water Quality Standards (AWQS), and hexavalent chromium in soil.

The site investigation area is in Tucson, generally bound by Curtis Road to the north, Prince Road to the south, Pomona Road to the east, and La Cholla Boulevard to the west. The following map shows the plume boundaries based on the most recent groundwater monitoring data.
The contaminants of concern at the site are trichloroethene (TCE) and chromium in groundwater, and hexavalent chromium in soil. Other historical contaminants of potential concern were 1,1-dichloroethene (1,1-DCE), cis-1,2-dichloroethene (cis-1,2-DCE), tetrachloroethene (PCE) and nitrates. These historical contaminants have not consistently been detected above Arizona AWQS.

In June 2013, the Final Miracle Mile RI Report was issued and the Feasibility Study (FS) was initiated. ADEQ began addressing RI data gaps. A local water provider was operating an ADEQ-funded wellhead treatment system as an early response action (ERA) to remove TCE from early 2007 to mid-2018. This system has been placed on bypass as concentrations of TCE have fallen below regulatory levels.

By 2018, all RI data gaps were addressed; additional boreholes and wells were installed to aid in delineating the lateral extent of the TCE groundwater plume; a soil vapor extraction (SVE) pilot test was conducted; the shallow soil-gas plume was defined; and indoor air samples were collected where soil-gas results indicated. In 2019, ADEQ installed a wellhead treatment system on a small water provider’s drinking water well and the FS report was finalized. The Proposed Remedial Action Plan (PRAP) was issued for a 60-day public comment period on June 2, 2020.

A full history of site activities is located in Appendix B.
Community Profile

Community Involvement Area (CIA)

The Miracle Mile WQARF site Community Involvement Area (CIA) designates a geographic area in which ADEQ will send mass mailings and focus its outreach efforts. CIA boundaries are determined based on site-specific characteristics such as the affected media (i.e., soil, surface water, or groundwater), groundwater flow direction, exposure routes, and proximity to residential areas and public facilities. The CIA may change as ADEQ collects more information.

The map below illustrates the CIA for the Miracle Mile WQARF site.
Community Demographics

Community demographics help ADEQ plan and implement community involvement activities. The following page displays key demographic information for the Miracle Mile WQARF site CIA.

The Tucson, AZ population is approximately 542,629 people (as reported by census.gov for 2020). The CIA boundary for the Miracle Mile WQARF site is mainly located within zip code 85705, with a very small northern portion in zip code 85704, and is estimated to contain approximately 6,010 people in 2,526 households. The Miracle Mile WQARF site is located within the boundaries of Tucson and unincorporated Pima County and consists of a mixture of commercial businesses and residential neighborhoods.

Residents identifying themselves as Hispanic or Latino, and speak Spanish, within the Miracle Mile WQARF site CIA comprise approximately 40% of the population, which is greater than the 30.7% average Hispanic and Latino population for the State of Arizona. ADEQ will provide interpretation and translation services as requested.

ADEQ looks at the community as a whole, with an emphasis on the proportion of residents under age five or above age 65. These populations are considered more vulnerable to the potential health effects associated with exposure to environmental contamination.

For further demographic information regarding the CIA, please refer to the listing of neighborhood associations, community schools, and vulnerable population centers in Appendix C, and local and state elected officials in Appendix D.
**MIRACLE MILE -- TUCSON, ARIZONA**

Community Involvement Areas are drawn 1/8th to 1/4th of a mile around a WQARF plume boundary depending on the direction that groundwater is moving.

---

**Population and Households 2020**

- **Total Population**: 6,010
- **Total Households**: 2,526
- **Average Persons per Household**: 2.36
- **Owner Occupied**: 63%
- **Renter Occupied**: 37%

**Vulnerable Population**

- **Age 0-4**: 6%
- **Age 65+**: 18%

---

**Race and Ethnicity**

The largest group: White Alone (74.41)%
The smallest group: Pacific Islander Alone (0.08)%

**Indicator** | **Value** | **Diff**
--- | --- | ---
White Alone | 74.41 | +4.76 |
Black Alone | 2.45 | -2.41 |
American Indian/Alaska Native Alone | 2.18 | -2.4 |
Asian Alone | 2.31 | -1.31 |
Pacific Islander Alone | 0.08 | -0.14 |
Other Race | 14.34 | +1.27 |
Two or More Races | 4.23 | +0.22 |
Hispanic Origin (Any Race) | 40.18 | +8 |

Bars show deviation from Arizona

---

**Language Spoken Age 18-65**

- English Only
- Spanish
- Asian/Pacific Island
- Spanish Only
- Indo-European
- Other

---

**2020 Technology Access**

- **Have a smartphone**: 86%
- **Have access to Internet at home**: 88%
- **Own any tablet**: 47%
- **Household owns a computer**: 65%

Source: U.S. Census Bureau, American Community Survey and data sources compiled by Esri ArcGIS Business Analyst Web App
Community Issues and Concerns

To better understand the community and its concerns, ADEQ conducted interviews with community members who live or work near the Miracle Mile WQARF site. ADEQ will use this community feedback to ensure that future outreach addresses community concerns and to determine effective communication methods. The following section summarizes common concerns related to the site and ADEQ outreach activities.

Summary of Community Issues

Community Concerns

Interviewees had the following questions/concerns about the site:

Site history:
- Most interviewees were very familiar with the history of the site.

Environmental and community impacts:
- How will we keep contamination out of the groundwater?
- Will there be impacts to downgradient wells?
- What is the location of the final SVE system, and pump and treat discharge location?
- 1,4-Dioxane and PFAS may be present near the site. Are those contaminants being monitored?

Outreach Recommendations

Interviewees provided the following feedback and suggestions on current and future outreach pertaining to the Miracle Mile WQARF site:

Sharing site information:
- Most respondents obtain information about the site from emails and the ADEQ website. US Mail and community meetings were slightly less preferable as ways of learning about the site.
Community Involvement Action Plan

The Miracle Mile WQARF site Community Involvement Action Summary table describes the required community involvement activities for each WQARF phase and notes the date of completed activities. This summary is followed by a description of ADEQ communication techniques to share site information and implement required activities.

Community Involvement Action Summary - Required Activities
The following table describes the required community involvement actions for the Miracle Mile WQARF site and notes which actions have been completed to date.
<table>
<thead>
<tr>
<th>WQARF Phase</th>
<th>ADEQ Community Involvement Activity</th>
<th>Statute (A.R.S.) and Rule (A.A.C) References</th>
<th>Activity to Date</th>
<th>Complete</th>
</tr>
</thead>
</table>
| Preliminary Investigation   | Provide owners and operators a copy of the Draft WQARF Site Registry Report for a 15-day comment period prior to publishing a notice in a newspaper announcing the availability of the Draft WQARF Site Registry Report for a 30-day public comment period. | A.R.S. § 49-287.01(C)  
A.R.S. § 49-289.03(A)(1)  
Mailing to owners and operators, March 1998  
| WQARF Registry Listing      | Following the listing of a site on the WQARF Registry, ADEQ will:  
  - Establish a preliminary community involvement area (see Chapter 2, Section A) within 90 days of site listing on the WQARF Registry.  
  - Provide written notice to the community on hazardous substance contamination in the area, the actual and potential risks and routes of exposure, possible health effects, and the opportunity to join the site mailing list.  
  - Identify ADEQ personnel to contact for further information. | A.R.S. § 49-289.02  
Notice to community and development of a Community Involvement Area, December 1998 | ✔️ | ✔️ |
|                             | Develop a Community Involvement Plan that establishes a Community Advisory Board, designates a spokesperson, provides for newsletters with current information about the status of remedial actions at the site, establishes a public document repository location, and provides for schedules of Community Advisory Board meetings and public meetings. Update the Community Involvement Plan at least every 2 years. | A.R.S. § 49-287.03(D)  
A.R.S. § 49-289.03(B)  
A.R.S. § 49-289.03(C)  
A.A.C. R18-16-404(C)(1)(i)  
A.A.C. R18-16-404(C)(1)(j)  
A.A.C. R18-16-404(C)(1)(k)  
A.A.C. R18-16-404(C)(1)(o)  
Original Community Involvement Plan, March 1999  
<table>
<thead>
<tr>
<th>WQARF Phase</th>
<th>ADEQ Community Involvement Activity</th>
<th>Statute (A.R.S.) and Rule (A.A.C) References</th>
<th>Activity to Date</th>
<th>Complete</th>
</tr>
</thead>
</table>
| Early Response Action | A work plan shall be prepared for each Early Response Action that will include a description of work to be done, known site conditions, a plan for conducting the work; a description of community involvement activities for the Early Response Action under R18-16-404; and a schedule. Community involvement activities may include development of a community involvement plan under A.A.C. R18-16-404(C) or community involvement activities appropriate to the scope and schedule of the work performed such as a general public notice to those who may be impacted by field work as indicated in A.A.C. R18-16-404(D)(2). If immediate action is necessary to address a current risk to public health or the environment, to protect a source of water, or to provide a supply of water, the work plan and written rationale may be prepared and the community involvement activities may be conducted after commencement of the Early Response Action. | A.A.C. R18-16-404  
A.A.C. R18-16-405(D)(2)  
A.A.C. R18-16-405(E)  
A.A.C. R18-16-405(G) | An ERA for wellhead treatment was implemented for FWID from 2007 to 2018  
An ERA for wellhead treatment at a small water provider was implemented in 2019 |          |
| Remedial Investigation | Provide notice to interested parties announcing the availability of the Remedial Investigation Scope of Work or Work Plan, Fact Sheet, and Community Involvement Plan outline for review and a 30-day public comment period. Provide notice indicating that any person by written agreement with ADEQ may develop and implement a work plan for the Remedial Investigation and Feasibility Study and solicit information regarding the current and future land and water uses at the site. These notices shall also provide an opportunity to request a public meeting. | A.R.S. § 49-287.03(B)  
A.R.S. § 49-287.03(C)  
A.A.C. R18-16-301(C)  
A.A.C. R18-16-403(F)  
A.A.C. R18-16-403(G)  
A.A.C. R18-16-404(C)(1)(a)  
A.A.C. R18-16-406(B)  
A.A.C. R18-16-406(D) | Combined notice, February 2000 | ✔        |

**Note:** A potentially responsible party search is conducted concurrently with the Remedial Investigation and Feasibility Study, but does not have mandated community involvement activities.
<table>
<thead>
<tr>
<th>WQARF Phase</th>
<th>ADEQ Community Involvement Activity</th>
<th>Statute (A.R.S.) and Rule (A.A.C) References</th>
<th>Activity to Date</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remedial Investigation</td>
<td>Establish a selection committee to choose Community Advisory Board members for the site. The selection committee shall consist of the following number of people from each organization: ● ADEQ: 1 ● Potentially Responsible Party: 1 ● Local Official: 1 ● Community Member: 2</td>
<td>A.R.S. § 49-289.03(D)</td>
<td>Selection committee, August 24, 1999</td>
<td></td>
</tr>
</tbody>
</table>
| (continued)               | Establish a Community Advisory Board of between 5 to 20 members that represent a diversified cross section of the community. Within 90 days of appointment by the Community Advisory Board selection committee, the Community Advisory Board shall elect co-chairpersons and develop a charter defining operating procedures, membership terms and obligations, goals for developing issues, concerns and opportunities related to quick cleanup of the site, and any other anticipated activities for identifying and improving the public’s access and understanding of information regarding the remediation process at the site. | A.R.S. § 49-289.03(C)  
A.R.S. § 49-289.03 (E)  
A.R.S. § 49-289.03(F) | Community Advisory Board established                                                                 |          |
|                           | Publish a combined public notice announcing the availability of the Draft Remedial Investigation Report for review and a minimum 30-day public comment period and the date of a public meeting to solicit Remedial Objectives for the site. The public meeting shall be held not less than 45 calendar days and not more than 90 calendar days after release of the Draft Remedial Investigation report, unless ADEQ sets a different date for good cause. The Draft Remedial Investigation Report should be provided to the Community Advisory Board, interested local government agencies, affected water providers and the Department of Water Resources. | A.A.C. R18-16-301(C)  
A.A.C. R18-16-404(C)(1)(b)  
A.A.C. R18-16-406(F)  
A.A.C. R18-16-406(i)(1)  
Remedial Objectives public meeting, May 16, 2007 | ✔        |
# Community Involvement Action Summary

<table>
<thead>
<tr>
<th>WQARF Phase</th>
<th>ADEQ Community Involvement Activity</th>
<th>Statute (A.R.S.) and Rule (A.A.C) References</th>
<th>Activity to Date</th>
<th>Complete</th>
</tr>
</thead>
</table>
| Remedial Investigation (continued) | Publish a public notice announcing the availability of the Proposed Remedial Objectives Report for a 30-day public comment period. Publish a public notice of the availability of the Final Remedial Investigation Report, which shall contain the results of site characterization and the final Remedial Objectives Report. The final Remedial Investigation report shall be accompanied by responsiveness summaries regarding comments, issues and concerns raised in the community involvement process and, if the report is prepared by a person other than ADEQ, copies of the comments received. | A.A.C. R18-16-301(C)  
A.A.C. R18-16-404(C)(1)(c)  
A.A.C. R18-16-406(I)(5)  
Final Remedial Investigation Report, June 13, 2013 | ✔ |
| Feasibility Study            | Provide notice to interested parties announcing the availability of the Feasibility Study Work Plan. Although not mandated, ADEQ will also provide public notice upon completion of the Feasibility Study.                                                                                                                                                                                                                                                                   | A.A.C. R18-16-404(C)(1)(d)  
A.A.C. R18-16-407(B) | Feasibility Study Work Plan public notice, September 29, 2014  
Final Feasibility Study Report and public notice, October 22, 2019 | ✔ |
| Proposed Remedial Action Plan | Publish a public notice announcing the availability of the Proposed Remedial Action Plan for a 90-day public comment period. (If not combined, separate public notices will be provided for the Draft Remedial Investigation/comment period and the Remedial Objectives solicitation and public meeting.) Mail the same notice(s) to interested parties. The notice(s) will describe the proposed remedy and its estimated cost, and identify where the Proposed Remedial Action Plan, Remedial Investigation, and Feasibility Study Reports may be inspected. | A.R.S. § 49-287.04(B)  
A.R.S. § 49-289.03(A)(2)  
A.A.C. R18-16-301(C)  
A.A.C. R18-16-404(C)(1)(e)  
A.A.C. R18-16-408(A) | Proposed Remedial Action Plan and public notice, June, 2020 | ✔ |
| Record of Decision           | Publish a public notice announcing the availability of the Record of Decision and Responsiveness Summary for review.                                                                                                                                                                                                                                                                                                                                 | A.R.S. § 49-287.04(G)  
A.A.C. R18-16-404(C)(1)(f)  
A.A.C. R18-16-410 | | |
<table>
<thead>
<tr>
<th>WQARF Phase</th>
<th>ADEQ Community Involvement Activity</th>
<th>Statute (A.R.S.) and Rule (A.A.C) References</th>
<th>Activity to Date</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation of Remedy (Remedial Actions)</td>
<td>Publish a public notice announcing a request for ADEQ to approve remedial actions at the site. The notice will provide the opportunity for a 30-day public comment period.</td>
<td>A.A.C. R18-16-301(C) A.A.C. R18-16-404(C)(1)(h) A.A.C. R18-16-413</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Provide notice to the public and interested parties of a request for ADEQ to waive a regulatory requirement (permit) to complete remedial actions.</td>
<td>A.R.S. § 49-290 A.A.C. R18-16-404(C)(1)(l)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Provide notice to the public that fieldwork conducted to remove contaminants of concern may result in noise, light, odor, dust, or other adverse impacts.</td>
<td>A.A.C. R18-16-404(C)(1)(m)</td>
<td>Provided as needed</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Provide notice to the public of a request for ADEQ to determine whether each of the Remedial Objectives for a site have been satisfied and will continue to be satisfied. The notice will provide the opportunity for a 30-day public comment period on the request.</td>
<td>A.A.C. R18-16-301(C) A.A.C. R18-16-404(C)(1)(n) A.A.C. R18-16-4-16(B)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operation &amp; Maintenance</td>
<td>Publish a public notice announcing the availability of the Operation &amp; Maintenance Plan for review and a 30-day public comment period. Mail the same notice to interested parties.</td>
<td>A.A.C. R18-16-301(C) A.A.C. R18-16-404(C)(1)(g) A.A.C. R18-16-411(E)</td>
<td>O&amp;M Plan for ERA July 2019</td>
<td></td>
</tr>
<tr>
<td>Removal from WQARF Registry</td>
<td>Although not mandated by Arizona Statute or administrative code, ADEQ may publish a public notice upon the removal of the site from the WQARF Registry.</td>
<td></td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>Any Phase</td>
<td>Publish a public notice announcing a request to ADEQ for a prospective purchaser agreement with a 30-day public comment period.</td>
<td>A.R.S. § 49-289.03(A)(3) A.A.C. R18-16-301(C)</td>
<td>Dos Rillitos LLC Public Notice Date: 05/12/21 Effective Date: 07/22/21</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Publish a public notice announcing the intention of ADEQ to enter into a settlement agreement with a responsible party,</td>
<td>A.R.S. § 49-289.03(A)(4) A.A.C. R18-16-301(C)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
and will have a 30-day public comment period.
Community Involvement Techniques

This section describes the specific activities and resources that ADEQ uses to communicate and engage with stakeholders and community members near the Miracle Mile WQARF site.

ADEQ uses the following community involvement techniques:

1. Community Advisory Board (CAB): The CAB has been conducting public meetings about the site with ADEQ’s assistance since 2008. CAB members advise ADEQ on appropriate means of delivering site information and provide input regarding content. CAB members also serve as an information resource for their community. CAB meetings are held at a location and date mutually agreed upon by the CAB members and an ADEQ representative. Care is taken to ensure that the location is easily accessible by the public. For a list of current CAB members, see Appendix E.

2. Local Print Media: ADEQ will publish all WQARF milestone public notices in the *The Daily Territorial* ([dailyterrestrial.com](http://dailyterrestrial.com)). The Arizona Newspaper Association maintains a database of all public notices published in major Arizona newspapers ([http://www.publicnoticeads.com/az/](http://www.publicnoticeads.com/az/)). For a list of other media outlets, see Appendix F.

3. U.S. Mail and Email Lists: ADEQ created U.S. Mail and email address lists to share updates on the Miracle Mile WQARF site. Anyone can join the site mailing list by contacting the ADEQ Community Involvement Coordinator or registering on GovDelivery ([public.govdelivery.com/accounts/AZDEQ/subscriber/new](http://public.govdelivery.com/accounts/AZDEQ/subscriber/new)).

4. ADEQ Website – ADEQ’s website provides visitors with three areas of information related to the site and is updated on an ongoing basis:
   - Notices Page: contains WQARF site public notices and announces comment periods ([azdeq.gov/notices](http://azdeq.gov/notices)).
   - Events Page: includes information on WQARF site public meetings, including CAB meetings ([www.azdeq.gov/events](http://www.azdeq.gov/events)).
   - Site Information Page: provides detailed site information and links to the site information repository. ([azdeq.gov/miracle-mile](http://azdeq.gov/miracle-mile)).

5. ADEQ Notice Board: Notices are displayed on boards located in ADEQ’s Phoenix and Tucson offices.

6. Public Meetings: In addition to CAB meetings, ADEQ may schedule public meetings or open houses as needed or requested. Examples include meetings with neighborhood/homeowner’s associations, schools, or other community groups.
6. Site Tours: The public may request site tours through the ADEQ Community Involvement Coordinator. Tours will be arranged in conjunction with the property owners and in compliance with current regulations.

ADEQ takes reasonable measures to provide access to community involvement activities to individuals with limited English proficiency and/or to those with disabilities. The community can request language interpretation, ASL interpretation, CART captioning services or disability accommodations through the ADEQ Title VI Nondiscrimination Coordinator (602-771-2228 or drago.leonard@azdeq.gov).

The following table of Communication Techniques illustrates how these techniques have and will be used throughout the WQARF process for the Miracle Mile WQARF site.
<table>
<thead>
<tr>
<th>Type</th>
<th>Why</th>
<th>When</th>
<th>CAB Members</th>
<th>Interested Parties List</th>
<th>ADEQ Website</th>
<th>Local Print Media</th>
<th>ADEQ Notice Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notice</td>
<td>Provide notice of availability of milestone documents, request comments, and solicit input.</td>
<td>Per mandate (See Community Involvement Action Summary table).</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>(site and calendar pages)</td>
<td>(The Daily Territorial)</td>
</tr>
<tr>
<td>CAB or Public Meeting Notice/Agenda</td>
<td>Provide two-way communication about the status of site activities. The notice announces the meeting and provides the agenda.</td>
<td>Variable schedule based on level of site activity as scheduled by CAB and ADEQ, with the exception of the required public meeting for the solicitation of remedial objectives (see Community Involvement Action Summary table).</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>(site, calendar, and CAB history pages)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Technical Presentation</td>
<td>Provide current information about site activity or related topics.</td>
<td>At CAB meetings or at specially requested public meetings.</td>
<td>✓</td>
<td>Not Applicable</td>
<td>(information repository or site page)</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Technical Milestone Document</td>
<td>Provide current technical information about site investigation/remediation activities (e.g., Remedial Investigation, Feasibility Study, etc.)</td>
<td>According to the WQARF Process as documents are developed and become available.</td>
<td>✓</td>
<td>Not Applicable</td>
<td>(online information repository)</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Site Fact Sheet/Newsletter</td>
<td>Provide current information about the site activity.</td>
<td>Published at the start of the Remedial Investigation and at specific milestones or other times as deemed</td>
<td>✓</td>
<td>✓</td>
<td>(online information)</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Type</td>
<td>Why</td>
<td>When</td>
<td>CAB Members</td>
<td>Interested Parties List</td>
<td>ADEQ Website</td>
<td>Local Print Media</td>
<td>ADEQ Notice Board</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------</td>
<td>-------------</td>
<td>-------------------------</td>
<td>-------------------</td>
<td>------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Public Meeting to solicit Remedial Objectives</td>
<td>Provide a forum to solicit Remedial Objectives. (Note that this meeting may be conducted in conjunction with a CAB meeting.)</td>
<td>After the release of the Draft Remedial Investigation Report.</td>
<td>✔</td>
<td>✔</td>
<td>(site and calendar pages)</td>
<td>(The Daily Territorial)</td>
<td>✔</td>
</tr>
<tr>
<td>Public notice announcing a request to ADEQ for a prospective purchaser agreement</td>
<td>Provide notice of availability and request comments.</td>
<td>Per mandate (see Community Involvement Action Summary table).</td>
<td>✔</td>
<td>✔</td>
<td>(online information repository)</td>
<td>Newspaper of general circulation in Pima County</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Public notice announcing the intention of ADEQ to enter into a settlement agreement with a responsible party.</td>
<td>Provide notice of availability and request comments.</td>
<td>Per mandate (see Community Involvement Action Summary table).</td>
<td>✔</td>
<td>✔</td>
<td>(online information repository)</td>
<td>Newspaper of general circulation in Pima County</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Site Tour</td>
<td>Provide walking or driving</td>
<td>If requested, and with cooperation of</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tours of the site to observe current site conditions and the surrounding community and environment.</td>
<td>Current property owners.</td>
<td>Contact ADEQ Community Involvement Coordinator.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDICES

The following appendices provide additional resources to support community involvement for the Miracle Mile WQARF site:

- Appendix A: WQARF Process Flowchart
- Appendix B: History of major activities by year at the Miracle Mile WQARF site
- Appendix C: Targeted communities in the Miracle Mile WQARF site CIA
- Appendix D: Elected officials representing communities within the CIA
- Appendix E: Miracle Mile WQARF site CAB members
- Appendix F: Local media outlets in the area
- Appendix G: Related state and local agencies
- Appendix H: Current and existing prospective purchaser agreements for property in and around the Miracle Mile WQARF site
- Appendix I: Current and existing consent decree settlements related to the Miracle Mile WQARF site
Appendix A

WQARF Process Chart

---

*PRP search proceeds concurrently with RI and FS

**ERA can occur anytime before PRAP and can occur concurrently with the rest of phases
Appendix B

Site History

1983  
In the fall, the drinking water supply well at the Tra-Tel RV Park, located southwest of the current Miracle Mile WQARF site, was found to be contaminated with tetrachloroethene (PCE). ADEQ began investigating the site by researching facilities in the area that may have been the source of contamination. ADEQ also distributed questionnaires concerning the use of hazardous substances to knowledgeable parties.

1986  
In June, trichloroethene (TCE) contamination was found in an industrial well located northeast of the Tra-Tel RV Park.

1988  
Soil and groundwater sampling was conducted. ADEQ also performed facility inspections and reissued questionnaires to knowledgeable parties. Research was completed to determine historical land use activities and property ownership.

1990-2004  
ADEQ installed 32 groundwater monitor wells to investigate groundwater conditions and contamination in the perched and regional aquifers as part of the Remedial Investigation at the site.

1998  
In September, the Miracle Mile site was placed on the WQARF Registry with an eligibility and evaluation score of 62 out of a possible 120.

The Flowing Wells Irrigation District (FWID) requested that ADEQ conduct an Interim Remedial Action (IRA) to address the loss of available water from one of its wells due to contamination.
In February, FWID and ADEQ signed an agreement under which FWID would implement the IRA requested in 1998 and ADEQ would reimburse the capital costs.

Passive soil gas surveys and soil borings were completed to obtain soil gas and soil samples, respectively, to investigate potential soil contamination.

ADEQ abandoned an inactive industrial production well to prevent potential cross-contamination between the contaminated perched aquifer and the underlying regional aquifer.

Spring Joint Specialists performed a Phase I site assessment, conducted subsurface soil testing, and removed underground storage tanks and some hexavalent chromium-contaminated soil at its property located within the Miracle Mile WQARF site. The company also installed three perched groundwater monitor wells. Total Chromium was detected in groundwater above AWQS, comingled with the TCE plume.

FWID began operation of a VOC treatment system as an ERA using granular activated carbon (GAC) to treat water supplied by two of its wells prior to distribution to customers. From start-up through 2013, the system treated approximately 1.5 billion gallons of water and removed approximately 7.5 pounds of TCE.

The Draft Remedial Investigation (RI) Report summarizing site characterization activities was completed and released for public comment. A public meeting soliciting input on proposed Remedial Objectives (RO) was held.

The GAC in the FWID arsenic and VOC treatment system was changed out in October. The Proposed RO Report was issued for 30 days of public comment.

ADEQ continued work to finalize the RI and RO reports and their associated responsiveness summaries.

In October, the FWID GAC water treatment system was shut down because TCE levels had been below the drinking water standard for an extended period of time. However, subsequent sampling data from one well showed slightly higher TCE concentrations, so the system brought back on line. Sitewide groundwater monitoring was conducted in October and November.
2011  Additional wells were installed to further evaluate the downgradient area of the plume.

In the fall of 2011, ADEQ began updating and revising the RI report to include recent site data and information.

2012  In March, ADEQ issued the Final RI Report.

2013-2015  RI data gaps were evaluated and filled, including delineation of the downgradient lateral and vertical extent of the TCE plume, soil gas sampling, and indoor air sampling.

An evaluation of nitrate detected in groundwater determined nitrate is not a COC.

2016  GAC was changed out and the GAC vessels were serviced at the FWID VOC treatment system. A Soil Vapor Extraction (SVE) pilot test was conducted for the FS.

2019  A new treatment system was installed on a nearby small water provider drinking water well. The FWID VOC treatment system was placed on by-pass due to TCE concentration being below standard.

ADEQ finalized the FS report in October.

2020-22  The Proposed Remedial Action Plan was released in June, 2020. The Record of Decision is in development at the time of publication of this CIP.
Appendix C
Targeted Communities

Neighborhood Associations
The following is the only neighborhood associations within the Miracle Mile WQARF site Community Involvement Area (CIA).

FLOWING WELLS NEIGHBORHOOD ASSOCIATION
Kevin Daily;mailto:kevincdaily@yahoo.com

Schools
The Miracle Mile WQARF site CIA includes the Tucson Unified School District. The following presents the community schools in the Miracle Mile WQARF site CIA:

CENTENNIAL ELEMENTARY SCHOOL
2200 West Wetmore Road, Tucson, AZ 85705

FLOWING WELLS JUNIOR HIGH SCHOOL
4545 North La Cholla Boulevard, Tucson, AZ 85705

HOMER DAVIS ELEMENTARY SCHOOL
4250 North Romero Road, Tucson, AZ 85705

TUCSON UNIFIED SCHOOL DISTRICT MAIN OFFICE
1010 East Tenth Street, Tucson, AZ 85719

Vulnerable Population Centers
ADEQ considers day cares, senior living homes, and some medical facilities as vulnerable population centers due to the age of clients served. Children under age five and adults above age 65 are considered more vulnerable to the potential health effects associated with exposure to environmental contamination.

COZY CASA DAY CARE
4535 North Jay Avenue, Tucson, AZ 85705

EARLY LEARNING CENTER
4605 North La Cholla Boulevard, Tucson, AZ 85705
HOMER DAVIS HEAD START
4258 North Romero Road, Tucson, AZ 85705 520-696-0303

YOUTH ENRICHMENT SERVICES – CENTENNIAL
2200 West Wetmore Road, Tucson, AZ 85705 520-887-2600

YOUTH ENRICHMENT SERVICES – HOMER DAVIS
4250 North Romero Road, Tucson, AZ 85705 520-696-8250
### Appendix D

**Elected Officials**

As of the publication of this Community Involvement Plan (CIP), the Community Involvement Area (CIA) for the Miracle Mile WQARF site falls under Tucson Ward 3; Pima County Supervisorial District 3; and Arizona Legislature Districts 3 and 9.

<table>
<thead>
<tr>
<th>TUCSON CITY Officials</th>
<th>PIMA COUNTY Supervisors</th>
<th>ARIZONA LEGISLATURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Hall</td>
<td>Pima County</td>
<td>Arizona House of Representatives</td>
</tr>
<tr>
<td>255 West Alameda 10th Floor Tucson, AZ 85701 (520) 791-4213</td>
<td>130 West Congress St. 11th Floor Tucson, AZ 85701 (520) 724-9999</td>
<td>Arizona State Senate Capitol Complex 1700 W. Washington St. Phoenix, AZ 85007 (602) 926-4221</td>
</tr>
<tr>
<td>Mayor</td>
<td>County Supervisor</td>
<td>Representative</td>
</tr>
<tr>
<td>City of Tucson</td>
<td>District 3</td>
<td>District 3</td>
</tr>
<tr>
<td>Regina Romero</td>
<td>Sharon Bronson</td>
<td>Andres Cano</td>
</tr>
<tr>
<td>(520) 791-4201</td>
<td>(520) 724-8051</td>
<td>Room #332</td>
</tr>
<tr>
<td><a href="mailto:Mayor.Romero@tucsonaz.gov">Mayor.Romero@tucsonaz.gov</a></td>
<td><a href="mailto:district3@pima.gov">district3@pima.gov</a></td>
<td>(602) 926-3027</td>
</tr>
<tr>
<td>City Manager</td>
<td></td>
<td><a href="mailto:acano@azleg.gov">acano@azleg.gov</a></td>
</tr>
<tr>
<td>City of Tucson</td>
<td>City Manager</td>
<td></td>
</tr>
<tr>
<td>Michael Ortega</td>
<td></td>
<td>Alma Hernandez</td>
</tr>
<tr>
<td>(520) 791-4204</td>
<td>City Manager</td>
<td>Room #122</td>
</tr>
<tr>
<td><a href="mailto:citymanager@tucsonaz.gov">citymanager@tucsonaz.gov</a></td>
<td></td>
<td>(602) 926-3136</td>
</tr>
<tr>
<td>Tucson City Council Member</td>
<td>Senator</td>
<td>Sally Ann Gonzales</td>
</tr>
<tr>
<td>Ward 3</td>
<td>District 3</td>
<td>Room #314</td>
</tr>
<tr>
<td>Kevin Dahl</td>
<td>Senator</td>
<td>(602) 926-3278</td>
</tr>
<tr>
<td>(520) 791-4711</td>
<td>District 9</td>
<td><a href="mailto:sgonzales@azleg.gov">sgonzales@azleg.gov</a></td>
</tr>
<tr>
<td><a href="mailto:ward3@tucsonaz.gov">ward3@tucsonaz.gov</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pamela Powers Hannley</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Room #335</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(602) 926-4848</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:ppowershannley@azleg.gov">ppowershannley@azleg.gov</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Victoria Steele</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Room #213</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(602) 926-5683</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:vsteele@azleg.gov">vsteele@azleg.gov</a></td>
</tr>
</tbody>
</table>
Appendix E

Community Advisory Board

The following table presents a list of the Miracle Mile WQARF Registry site Community Advisory Board (CAB) members as of November 2019.

<table>
<thead>
<tr>
<th>Miracle Mile WQARF Site</th>
<th>CAB Co-Chairs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fred Bass</strong></td>
<td><strong>Jan Randolph</strong></td>
</tr>
<tr>
<td>(520) 850-8677</td>
<td>(520) 887-4138</td>
</tr>
<tr>
<td><a href="mailto:fred.bass@pima.gov">fred.bass@pima.gov</a></td>
<td><a href="mailto:jrandolphjones@gmail.com">jrandolphjones@gmail.com</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAB Members</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gary Abrams</strong></td>
</tr>
<tr>
<td>(520) 887-1727</td>
</tr>
<tr>
<td><a href="mailto:gary.abrams@abrams.com">gary.abrams@abrams.com</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Henry Madrid</th>
<th>Wally Wilson</th>
</tr>
</thead>
<tbody>
<tr>
<td>(520) 907-2767</td>
<td>(520) 241-3599</td>
</tr>
<tr>
<td><a href="mailto:hmmadrid@aol.com">hmmadrid@aol.com</a></td>
<td><a href="mailto:wwilson@metrowater.com">wwilson@metrowater.com</a></td>
</tr>
</tbody>
</table>
Appendix F

Media Outlets

The community may use any media outlets to share information on the Miracle Mile WQARF site. ADEQ will publish all site-related public notices in the The Daily Territorial. All future public notices for the Miracle Mile WQARF site can be found by searching www.publicnoticeads.com/az/.

Newspapers and Magazines

For a current list of Tucson area newspapers and magazines, visit abyznewslinks.com/uniteaz.htm.

ARIZONA DAILY STAR
520-573-4142

ARIZONA DAILY WILDCAT
888 North Euclid Ave, Room 301, Tucson, AZ 85721
520-621-3552

BIZ TUCSON
4729 East Sunrise Drive, Suite 505, Tucson, AZ 85718
520-299-1005

THE DAILY TERRITORIAL
2900 E Broadway Blvd, Tucson, AZ 85716
520-294-1200

DESERT TIMES
7225 North Mona Lisa Road, Suite 125, Tucson AZ 85741
520-797-4384

THE EXPLORER NEWSPAPER and INSIDE TUCSON BUSINESS
7225 North Mona Lisa Road, Suite 125, Tucson AZ 85741
520-797-4384

TUCSON CITIZEN
No phone number

TUCSON WEEKLY
7225 North Mona Lisa Road, Suite 125, Tucson AZ 85741
520-797-4384

---

2 The Tucson Citizen ended its print edition in 2009, then became an online compendium for blogs until February 2014. The Tucson Citizen website (www.tucsoncitizen.com) remains an archive as a community resource.
Radio

The following stations focus on local and national news. For a current list of all Tucson area radio stations, visit radio-locator.com.

ARIZONA PUBLIC MEDIA
(KUAT, KUAZ [National Public Radio])
P.O. Box 210067, Tucson, AZ 85721
520-621-5828
www.azpm.org

iHEART MEDIA
(KMIY, KRQQ, KOHT, KNST, KTZR, KXEW)
3202 N. Oracle Road, Tucson, AZ 85705
iheartmedia.com/stations?market=TUCSON-AZ

CUMULUS MEDIA
(KCUB, KHYT, KIIM, KSZR, KTUC)
575 West Roger Road, Tucson, AZ 85705
520-887-1000
cumulusmedia.com

FOUNDATIONS FOR CREATIVE BROADCASTING
(KXCI)
220 South 4th Avenue, Tucson, AZ 85701
520-623-1000
kxci.org

GOOD NEWS RADIO BROADCASTING
(KCEE, KVOI, KGMS, KLTU)
3222 South Richey Avenue, Tucson, AZ 85713
520-790-2440
kvoi.com

BUTSOS MEDIA
(KTGV)
520-722-5486
bustosmedia.com

LOTUS COMMUNICATIONS
(KTKT, KLPX, KFMA, KCMT, KMXZ, KFFN)
3871 North Commerce Drive, Tucson, AZ 85705
520-407-4500
lotuscorp.com/tucson-arizona

Television

The following channels focus on local and national news. For a current list of Prescott area television channels, visit abyznewslinks.com/uniteazph.htm.

KGUN Channel 9 (ABC)
7280 East Rosewood Street, Tucson, AZ 85710
520-722-5486
kgun9.com

KHRR Channel 40 (Telemundo)
5151 East Broadway Boulevard, Tucson, AZ 85711
520-396-2617

KMSB Channel 11 (FOX)  KOLD Channel 13 (CBS)
7831 North Business Park Drive, Tucson, AZ 85743
520-744-1313
www.kold.com
<table>
<thead>
<tr>
<th>Station</th>
<th>Channel</th>
<th>Channel Type</th>
<th>Phone</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>KUAS Channel 6/27 (PBS)</td>
<td>6/27</td>
<td>PBS</td>
<td>520-621-5805</td>
<td>tv.azpm.org</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KVOA Channel 4 (NBC)</td>
<td>4</td>
<td>NBC</td>
<td>520-792-2270</td>
<td>kvoa.com</td>
</tr>
</tbody>
</table>
Appendix G

Local and State Agencies

Additional agencies that may be able to address concerns related to the Miracle Mile WQARF site.

State of Arizona

Department of Agriculture
1688 West Adams Street
Phoenix, AZ 85007
602-542-4373
agriculture.az.gov

Department of Health Services
150 North 18th Avenue
Phoenix, AZ 85007
602-542-1025
azdhs.gov

Department of Water Resources
Groundwater Permitting and Wells Section
1110 West Washington St., Ste 310
Phoenix, AZ 85007
602-771-8527
new.azwater.gov/permitting-wells

City of Tucson

Tucson Water Department
3100 West Alameda Street
Tucson, AZ 85701
520-791-3242
tucsonaz.gov/water

Other

Agency for Toxic Substances and Disease Registry
Western Branch – Region 9
75 Hawthorne Street, Suite 9410, M/S:HHS-1
San Francisco, CA 94105
800-232-4636
atsdr.cdc.gov

Real Estate Seller Disclosures
Arizona Association of Realtors
255 East Osborn Road #200
Phoenix, AZ 85012
602-248-7787
Appendix H

Prospective Purchaser Agreements

The following is a list of parties that have requested or received prospective purchaser agreements from the Arizona Department of Environmental Quality for properties in or around the Miracle Mile WQARF site.

Purchaser Name: Dos Rillitos, LLC
Property Location: 3660 N Romero Road
                  Tucson, AZ 86705
Public Notice Date: 05/12/21
Effective Date: 07/22/21
Appendix I

Consent Orders and Settlements

As of the date of this CIP, there are no parties that have entered into consent decree settlements with the ADEQ for properties in or around the Miracle Mile WQARF site.
Acronyms and Glossary of Terms

Aquifer: An underground rock formation composed of such materials as sand, soil, or gravel, that can store groundwater and supply it to wells and springs. In aquifers, groundwater occurs in sufficient quantities to be used for drinking water, irrigation, and other purposes.

Aquifer Water Quality Standards (AWQS): State of Arizona maximum levels for contaminants which apply to groundwater in aquifers designated for drinking water use. For example, the AWQS for tetrachloroethene is 5 micrograms per liter (µg/L).

Arizona Administrative Code (A.A.C.): The publication in which the official rules of the state of Arizona are published. The Code is the official compilation of rules that govern state agencies, boards, and commissions.

Arizona Department of Environmental Quality (ADEQ): ADEQ is the executive agency of the Arizona State Government mandated to enforce and administer the State’s environmental laws and regulations.


Cleanup: Actions taken that deal with a release or threat of a release of hazardous substances that could adversely affect public health and/or the environment. The word “cleanup” is sometimes used interchangeably with the terms remedial action, removal action, response action, remedy, remediation, or corrective action.

Community Advisory Board (CAB): A diverse group of community members interested in or affected by the presence of a WQARF site. By statute, ADEQ is required to form a CAB for each WQARF Registry site where ADEQ is initiating a Remedial Investigation. ADEQ seeks the CAB’s input in the decision-making process and works with them from the onset of the RI/FS process until the requirements of the record of decision have been fulfilled.

Community Involvement Area: The mailing area of residences and businesses used in the notification for public meetings and other written notices regarding a site.

Community Involvement Coordinator: The ADEQ employee responsible for ensuring that all statutes and rules related to the involvement of the public and public outreach at WQARF sites are upheld and complied with by ADEQ. Community Involvement Coordinators manage and coordinate the work of CABs for WQARF sites.

Community Involvement Plan (CIP): A document that identifies techniques used by ADEQ and EPA to communicate effectively with the public during the Superfund cleanup process at a specific site. This plan describes the site history, nature and history of community involvement, and concerns expressed during community interviews. In addition, the plan outlines methodologies and timing for continued interaction between the Agencies and the public at the site.

Contaminant: A harmful or hazardous substance released into the environment that is not naturally occurring, or above background levels.
Contamination: Any hazardous or regulated substance released into the environment.

Early Response Action (ERA): Refers to a remedial action performed prior to the final remedy, and often prior to the Remedial Investigation. An ERA addresses current risks to public health, welfare, and the environment; protects or provides a supply of water; addresses sources of contamination; or controls or contains contamination where such actions are expected to reduce the scope or cost of the remedy needed at the site. Also referred to as an interim remedial action.

Eligibility and Evaluation score (E&E): ADEQ’s method to prioritize sites for investigation and cleanup. The score is based on multiple criteria and does not always mean there is a current threat to health.

Feasibility Study (FS): A process to identify a reference remedy and alternative remedies that appear to be capable of achieving the Remedial Objectives for the site. It is often done as part of a two-phase investigation in conjunction with a Remedial Investigation (RI/FS).

Groundwater: Water beneath the earth’s surface in the spaces between soil particles and rock surfaces. In aquifers, groundwater occurs in sufficient quantities to be used for drinking water, irrigation, and other purposes.

Hazardous Substance: Any material that, because of its quantity, concentration, physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment.

Heavy metals: Refers to a group of metals including arsenic, chromium, copper, lead, mercury, silver and zinc. Heavy metals often are present at industrial sites where operations have included battery recycling and metal plating.

Information Repository: A collection of documents about a specific project. Information on certain WQARF and Superfund sites may be available at ADEQ offices and libraries throughout the state.

Monitoring Well (Monitor Well): A well installed for the purpose of collecting samples such as groundwater and soil gas. Analytical results from samples are used to characterize the extent of contamination, the direction of groundwater flow, and the types and quantities of contaminants present in the groundwater.

Perched Aquifer: A relatively small, localized aquifer that lies above the regional aquifer and is underlain by a confining layer. Perched aquifers may be formed when the groundwater table drops and water is trapped above a confining layer. They are usually discontinuous and are not usually sources for drinking water.

Plume: A well-defined area of contamination in groundwater, soil or the air, often used to describe the dispersion of contamination in soil and/or groundwater.

Potentially Responsible Party (PRP): A party (individual or corporation) identified by state or federal authorities as potentially liable for cleanup costs at a contaminated site.

Preliminary Investigation (PI): The process of collecting and reviewing available information about a known or suspected hazardous waste site or release.

Proposed Remedial Action Plan (PRAP): A document that reviews the cleanup alternatives presented in the site Feasibility Study and identifies ADEQ’s preferred alternative. Selection of a preferred alternative is not a closed-end commitment to use that alternative; rather, it is a way for the agency to indicate, based on experience and expertise, which alternative is
the most likely course of action. ADEQ must actively solicit public review of and comment on all the alternatives under consideration.

**Public Comment Period:** A period during which the public can formally review and comment on various documents and ADEQ actions.

**Record of Decision (ROD):** A legal document that announces and explains the cleanup methods ADEQ will use at a Superfund/WQARF site. The Record of Decision is based on information and technical analysis generated during the Remedial Investigation and Feasibility Study, and on consideration of comments received during the public comment record for the Proposed Remedial Action Plan.

**Remedial Action (RA):** Any action taken to investigate, monitor, assess and evaluate the release or threat of release of hazardous substances or contaminants to the environment. It may also refer to the actual “cleanup” of the environment by various removal, treatment, monitored remediation, or corrective actions. The term cleanup is sometimes used interchangeably with the terms remedial action, removal action, response action, remedy, remediation, or corrective action.

**Remedial Investigation (RI):** An in-depth study designed to gather the data necessary to determine the nature and extent of contamination at a site and the risk posed by the contamination.

**Remedial Objective (RO):** Established remedial goals for the current and reasonably foreseeable uses of lands and waters of the state that have been or are threatened to be affected by a release of hazardous substance.

**Remediation:** Cleanup or other methods used to remove or contain a toxic spill or hazardous materials.

**Remedy:** Cleanup method chosen for a site.

**Responsible Party:** An individual or company (e.g., an owner, operator, transporter, or generator of hazardous waste) that is responsible for the contamination problems at a Superfund/WQARF site. Whenever possible, responsible parties are required to clean up hazardous waste sites they have contaminated.

**Responsiveness Summary:** A summary of oral and written comments (and ADEQ responses to those comments) received during the public comment period.

**Soil Vapor (Soil Gas):** Gaseous elements and compounds that occur in the small spaces between soil particles. Such gases can move through or leave the soil or rock, depending on changes in pressure.

**Soil Vapor Extraction (SVE):** A commonly used technique for cleaning up contaminated soils. This process physically separates contaminants from soil in a vapor form by exerting a vacuum through the soil formation; removes volatile and semi-volatile organic compounds from the ground surface.

**Superfund:** The federal program operated under the legislative authority of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA) that funds and carries out U.S. Environmental Protection Agency solid waste emergency and long-term removal and remedial activities. These activities include establishing the National Priorities List, investigating sites for inclusion on the list, determining their priority, and conducting and/or supervising cleanup and other remedial actions. It provides for the cleanup of
hazardous substances released into the environment, regardless of fault. The term Superfund also is used to refer to cleanup programs designed and conducted under CERCLA and its subsequent amendments.

**Tetrachloroethene or Tetrachloroethylene or Perchloroethene (PCE):** A clear, colorless, liquid with a chloroform or sweet odor and a low boiling point; a solvent used for dry-cleaning; degreasing and drying metals and other solids; dissolving waxes, greases, oils, fats, and gums, and in other industrial applications. PCE is a potential occupational carcinogen. Evaporation of PCE increases as temperature increases.

**Trichloroethene or Trichloroethylene (TCE):** A colorless liquid used as a solvent, metal degreasing agent, and in other industrial applications.

**Vadose Zone:** The area between the ground surface and the groundwater.

**Vapor Intrusion:** The migration of volatile chemicals from the subsurface into overlying buildings. Volatile chemicals in buried wastes and/or contaminated groundwater can emit vapors that may migrate through subsurface solid and into air spaces of overlying buildings.

**Volatile Organic Compounds (VOC):** A large group of carbon-containing compounds that are easily dissolved into water, soil, or the atmosphere and evaporate readily at room temperature. Examples of VOCs include PCE and TCE. These contaminants are typically generated from metal degreasing, printed circuit board cleaning, gasoline, and wood preserving processes.

**Water Quality Assurance Revolving Fund (WQARF):** Also known as the State Superfund, WQARF is the program and funding used to address hazardous substance releases within the state that are not covered by other specific programs.