

APPENDIX K  
Final Remedial Objectives Report

**REMEDIAL OBJECTIVES REPORT  
32<sup>ND</sup> STREET AND INDIAN SCHOOL ROAD  
WATER QUALITY ASSURANCE REVOLVING FUND  
REGISTRY SITE  
PHOENIX, ARIZONA**



June 2019

Arizona Department of Environmental Quality  
Remedial Projects Unit  
1110 West Washington  
Phoenix, Arizona 85007

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## LIST OF ABBREVIATIONS & ACRONYMS

A.A.C.	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
ADWR	Arizona Department of Water Resources
AMA	Active Management Area
ARS	Arizona Revised Statutes
AWQS	Aquifer Water Quality Standard
COP	City of Phoenix
1,2-DCE	1,2-Dichloroethene
FS	Feasibility Study
LWUS	Land and Water Use Study
PCE	Tetrachloroethene
RO	Remedial Objective
RI	Remedial Investigation
the Site	32nd Street and Indian School Road
SRL	Soil Remediation Level
SRP	Salt River Project
TCE	Trichloroethene
µg/L	Micrograms per liter
VOCs	Volatile Organic Compounds
WQARF	Water Quality Assurance Revolving Fund

## 1.0 INTRODUCTION

The Arizona Department of Environmental Quality (ADEQ) has prepared this Proposed Remedial Objectives (ROs) Report for the 32nd Street and Indian School Road Water Quality Assurance Revolving Fund (WQARF) Registry Site (the Site) to meet requirements established under Arizona Administrative Code (A.A.C.) R18-16-406.

The 32nd Street and Indian School Road WQARF Site is located in the City of Phoenix (COP). The boundaries of the Site are approximately Indian School Road to the north, 32nd Street to the east, Harvard Street to the south, and 16th Street to the west. Contaminants of concern at the Site are tetrachloroethene (PCE), trichloroethene (TCE), 1,2-dichloroethene (1,2-DCE), and vinyl chloride. However, only PCE currently exceeds the Aquifer Water Quality Standard (AWQS) in groundwater and only PCE has historically exceeded a Soil Remediation Level (SRL).

This Proposed RO Report relies upon the land and water use study questionnaires collected in 2014 and 2017 and the solicitation of proposed ROs during the comment period on the Draft Remedial Investigation (RI) report in 2019. The land and water use questionnaires are included in the Land and Water Use Study (LWUS) report, Appendix E of the 32<sup>nd</sup> St and Indian School Draft RI Report prepared by Geosyntec Consultants for ADEQ.

ROs are established for the current and reasonably foreseeable uses of land and waters of the state that have been or are threatened to be affected by a release of a hazardous substance. Pursuant to A.A.C. R18-16-406(D), reasonably foreseeable uses of land are those likely to occur at the site and the reasonably foreseeable uses of water are those likely to occur within one hundred years unless site-specific information suggests a longer time period is more appropriate.

Reasonably foreseeable uses are those likely to occur, based on information provided by water providers, well owners, land owners, government agencies, and others. Not every use identified in the LWUS report will have a corresponding RO. Uses identified in the LWUS report may or may not be addressed based on information gathered during the public involvement process, limitations of WQARF, and whether the use is reasonably foreseeable. Ecological uses at the Site are not addressed herein because the remedial investigation has determined that there are no identified ecological receptors as defined by A.A.C. 18-7-201.

The ROs must be stated in the following terms: (1) protecting against the loss or impairment of each use; (2) restoring, replacing, or otherwise providing for each use; (3) when action is needed to protect or provide for the use; and (4) how long action is needed to protect or provide for the use.

The ROs chosen for the Site will be used to evaluate specific remedial measures and strategies in the feasibility study (FS) phase of the WQARF process. A remedial strategy is one or a combination of six general strategies identified in Arizona Revised Statutes (A.R.S.) §49-282.06(B)(4). These strategies include: plume remediation, physical containment, controlled migration, source control, monitoring, and no action. A.R.S. §49-282.06(B)(4)(a) states that for remediation of soil, the selected remedial action shall be consistent with the soil remediation standards adopted pursuant to A.R.S. §49-152. A remedial measure is a specific action taken in conjunction with remedial

strategies to achieve one or more ROs (for example, well replacement, well modification, water treatment, water supply replacement, and engineering controls)

Written comments were accepted for a period of 30 days following the public notice on May 2, 2019. This report includes a responsiveness summary to written comments received from the public during the comment period (Attachment A). Copies of written comments are included as Attachment B.

## **2.0 REMEDIAL OBJECTIVES FOR LAND USE**

Generally, the Site is located in a mixed urban, commercial, and residential area. As described in the RI report, the primary land uses within the Site are single family residential (38%), parks/open space (26%), multiple family residential (12%), commercial/industrial (12%), public/transportation (8%), and vacant (4%). Based on future land use plans provided by the COP, there are no immediate plans to change the land use or zoning for the areas of the COP within and adjacent to the Site.

### **2.1 Summary of Impacts to Current and Reasonably Foreseeable Land Use**

Typically, ROs for land use are established for those properties known or reasonably expected to be contaminated with hazardous substances above a regulatory or risk-based level. Numerous soil and soil-gas samples have been collected during several phases of work at the Site. The results of this work have indicated that volatile organic compounds (VOCs), primarily PCE, are present in soil at the Site. PCE has been detected at concentrations above SRLs in the vicinity of the identified source areas for chlorinated hydrocarbons; the former Viking Cleaners and the former Maroney's Cleaners. According to the LWUS report, this area will remain commercial/non-residential. PCE and TCE concentrations have exceeded site-specific risk levels developed for the vapor intrusion pathway within source areas and near residential properties. According to A.A.C. 18-7-203, remediation of soil must meet background, pre-determined, or site-specific standards.

Contaminant concentrations in soil exceeding SRLs have been detected at depth below barriers (i.e., concrete slabs, paved or asphalted surfaces) where they are currently inaccessible to direct contact by humans. These exceedances have occurred only within the identified source areas. Impacts to soil gas have been reported across a larger area of the Site. However, the greatest soil-gas impacts were measured in the vicinity of the source areas, where concentrations have exceeded site-specific risk-based levels. Early response actions implemented in these areas have significantly reduced contaminant concentrations.

### **2.2 Soil Remedial Objective**

PCE concentrations at the Site have exceeded SRLs at the source properties and PCE and TCE concentrations have exceeded site-specific risk-based levels for soil gas at the source properties and beneath residential properties. The greatest impacts to the soil have occurred within the source areas, whose current and reasonably foreseeable use is commercial/non-residential. Based on this information, the remedial objective for the soil is:

**Protect against the loss or impairment of land threatened by contaminants of concern at the 32<sup>nd</sup> Street and Indian School Road WQARF site and restore land that has been impaired by contaminants of concern at the 32<sup>nd</sup> Street and Indian School Road WQARF site to below applicable remediation levels. Action is needed for the present time and for as long as necessary to ensure that the level of contamination in the soil associated with the Site no longer exceeds applicable remediation levels.**

### **3.0 REMEDIAL OBJECTIVES FOR GROUNDWATER USE**

The groundwater use portion of the LWUS Report is an inclusive summary of information gathered from the Arizona Department of Water Resources (ADWR), water providers, and municipalities. The water providers within the Site are the COP and Salt River Project (SRP).

The Site lies within the Phoenix Active Management Area (AMA), an area where groundwater use is controlled and regulated. The Phoenix AMA was created by the Arizona Groundwater Management Code passed in 1980 and covers approximately 5,646 square miles in central Arizona. All groundwater withdrawn from any AMA must occur under a groundwater right or permit, unless groundwater is being withdrawn from an exempt well. Exempt wells pump less than 35 gallons per minute.

According to ADWR records, there are twenty-nine non-exempt withdrawal wells located within one mile of the Site; eight are owned and operated by SRP and one is owned by COP. ADWR records indicate that there are fourteen exempt withdrawal wells located within one-mile of the estimated PCE plume boundary. The exempt wells have an intended use of domestic irrigation. The COP and SRP have service area rights in the Site, however, only SRP is currently pumping groundwater from within the Site. Questionnaires were mailed to the COP and SRP to obtain information regarding current and future uses of groundwater within the Site.

#### **3.1 Summary of Impacts to Current and Reasonably Foreseeable Groundwater Use**

Currently, groundwater within the Site is contaminated with PCE above the AWQS. This contamination would prevent the use of untreated groundwater for potable supply. The COP owns one groundwater well (ADWR registration #55-626528) within one mile of the Site and has indicated that it may install future potable supply wells within the Site in the future.

SRP owns ten groundwater wells within 1.25 miles of the Site that are used for irrigation supply, including wells SRP16E-6.8N and 16E-7.5N which are located within the historical plume boundary. Groundwater pumping at these wells has been intermittent in the recent past, but the wells can be activated at any time. Although recent use of the irrigation wells in and adjacent to the Site has been intermittent, SRP has no plans to eliminate any of these wells from their system. Based on demand analysis, SRP has indicated it will continue to need the wells in the area to remain operational, especially during dry years.

SRP anticipates all its properties in the vicinity of the Site will remain in use over the next 100 years. Additionally, SRP anticipates that its groundwater supply wells that are in the vicinity will likely transition from irrigation to municipal service (potable supply) within this time period and it may become necessary to install additional groundwater supply wells in close proximity to the Site boundaries in the future.

### 3.2 Groundwater Remedial Objectives

PCE concentrations exceed the AWQS in groundwater at the Site. Currently, groundwater within the Site is used only for irrigation. However, reasonably foreseeable future groundwater use at this Site includes both irrigation and potable supply. Therefore, the ROs for groundwater use at the Site are as follows:

The RO for irrigation use at the Site is:

**Protect against the loss or impairment of irrigation water threatened by contaminants of concern at the 32<sup>nd</sup> Street and Indian School Road WQARF site. Where protection cannot be achieved in a reasonable, necessary or cost-effective manner; restore, replace, or otherwise provide for irrigation water that is lost or impaired by contaminants of concern at the 32<sup>nd</sup> Street and Indian School Road WQARF site. Action is needed for as long as necessary to ensure that, while the water exists and the resource remains available, the contamination associated with Site does not prohibit or limit the designated use of groundwater.**

The RO for potable use at the Site is:

**Protect against the loss or impairment of potable water threatened by contaminants of concern at the 32<sup>nd</sup> Street and Indian School Road WQARF site. Where protection cannot be achieved in a reasonable, necessary or cost-effective manner; restore, replace, or otherwise provide for potable water that is lost or impaired by contaminants of concern at the 32<sup>nd</sup> Street and Indian School Road WQARF site. Action is needed for as long as necessary to ensure that, while the water exists and the resource remains available, the contamination associated with Site does not prohibit or limit the designated use of groundwater.**

## 4.0 REMEDIAL OBJECTIVES FOR SURFACE WATER USE

Surface water for use in the Site is distributed by an active flood irrigation district of SRP for residential irrigation. Surface water is transported from the southeast to northwest in the SRP Grand Canal, crossing the boundaries of the Site. Oriented north-south from the Grand Canal, at approximate half-mile intervals are open and piped lateral canals that transport water by gravity flow southward. The lateral canals are fed by SRP production wells located in the vicinity of Site. SRP anticipates that a drinking water plant will be built on the Grand Canal within the next 100 years.



#### **4.1 Summary of Impacts to Current and Reasonably Foreseeable Surface Water Use**

There are no known current impacts from the Site directly to the surface water in the SRP canals.

#### **4.2 Surface Water Remedial Objective**

Current surface water use in the area of the Site is irrigation from man-made canals containing pumped groundwater. The projected future use of the canal water includes drinking water. However, ROs for surface water use are not necessary, as ROs for groundwater pumped into the canal address protection of this use.

## **Attachment A**

### **REMEDIAL OBJECTIVES RESPONSIVENESS SUMMARY**

***EAST CENTRAL PHOENIX – 32<sup>ND</sup> STREET AND INDIAN SCHOOL ROAD WQARF REGISTRY SITE  
PHOENIX, ARIZONA***



***June 2019***

# **REMEDIAL OBJECTIVES RESPONSIVENESS SUMMARY**

*EAST CENTRAL PHOENIX – 32<sup>ND</sup> STREET AND INDIAN SCHOOL ROAD WQARF  
REGISTRY SITE  
PHOENIX, ARIZONA*

## **INTRODUCTION**

Pursuant to the requirements of the Arizona Administrative Code (A.C.C.) R-18-16-406(J), the Arizona Department of Environmental Quality (ADEQ) has prepared this comprehensive responsiveness summary for comments received on the *Proposed Remedial Objectives Report, Report 32nd Street and Indian School Road WQARF Site, Phoenix, Arizona* dated May 2, 2019. ADEQ also accepted proposed remedial objectives and input on remedial objectives from the public. A community advisory board (CAB)/public meeting was held at Arcadia High School, 4703 East Indian School Road, Phoenix, Arizona on April 22, 2019 to solicit proposed remedial objectives. The 32nd Street and Indian School Road Water Quality Assurance Revolving Fund (WQARF) Site (Site) Proposed Remedial Objectives (RO) Report was made available for public review and comment on May 2, 2019 for 30 days. The comments received are summarized below with ADEQ responses. Copies of written comments and proposed remedial objectives submitted by the public are contained in the attachment following the summaries below.

## **Written Comments**

### **Julie Riemenschneider, COP (Comments dated July 30, 2018)**

1. The City agrees with the proposed RO's that ADEQ has written for soil, irrigation and potable groundwater. The RO for groundwater indicates that ADEQ acknowledges the important resource groundwater is for the City and the future of our citizens.
  - ADEQ Response: ADEQ thanks the City for their comment.

### **Andrea Martinez, SRP**

1. SRP has reviewed both RO reports and respectfully requests that the Arizona Department of Environmental Quality (ADEQ):
  - 1) Update the proposed RO reports to specifically reflect the foreseeable SRP water use in proximity of the WQARF Sites.
  - 2) Maintain the proposed groundwater irrigation use and potable use ROs for the WQARF Sites but include an RO that will protect against loss or impairment of SRP wells in the vicinity of the WQARF Sites.
  - 3) Include surface water ROs for the WQARF Sites.

### **SRP's Foreseeable Water Uses**

As ADEQ is aware, SRP provides water to its customers in the Phoenix area through a series of canals and laterals. In 2017, SRP entered into an Agreement with the City of Goodyear to wheel Goodyear’s surface water supplies to the future Goodyear WTP. Although the water delivered to Goodyear will primarily be Goodyear’s surface water supplies, from an operational perspective, some of that water may be physically comingled with groundwater from SRP production wells located near the WQARF Sites. Once the Goodyear WTP is completed, the designated use of groundwater wells in and around the WQARF Sites will include both irrigation and raw drinking water supply. As a practical matter, pumped groundwater from around the WQARF Sites may also be included in the raw drinking water supply for Goodyear.

This matter is discussed in more detail in SRP’s comment letters for the Draft Remedial Investigation (RI) reports for the WQARF Sites (*RE: Salt River Project Comments – Draft Remedial Investigation Report for 24<sup>th</sup> Street and Grand Canal WQARF Site* and *RE: Salt River Project Comments – Draft Remedial Investigation Report for 32<sup>nd</sup> Street and Indian School WQARF Site*, both dated May 6, 2019). It is important that ADEQ take this matter into consideration when finalizing the ROs for the WQARF Sites. It is SRP’s expectation that the ROs will accurately reflect and protect SRP’s current and foreseeable water use.

### **SRP Supports Groundwater and Surface Water ROs**

SRP is appreciative that ADEQ proposed groundwater ROs for both irrigation use and potable water use at the WQARF Sites. SRP believes that both RO types are appropriate in light of the current and reasonably foreseeable use of groundwater in the area, and the presence of tetrachloroethylene (PCE) contamination hotspots that remain at the WQARF Sites and exceed the Aquifer Water Quality Standards (AWQS). In the event that PCE or trichloroethylene (TCE) levels exceed drinking water standards when the Goodyear WTP becomes operational, SRP expects that appropriate contingency measures, such as wellhead treatment, will be implemented to allow continued operation of the SRP wells.

SRP requests that ADEQ modify the ROs to more closely track the regulatory language in Ariz. Admin. Code § R18-16-406.I.4. For example, and more specifically, ROs are intended, among other things, to “protect against the loss or impairment of each listed use that is threatened to be lost or impaired as a result of the release of a hazardous substance.” (Ariz. Admin. Code §R18-16-406.I.4.a.) Notably, the ROs as drafted do not address the regulatory requirement for protection against loss or impairment. Because multiple SRP wells in vicinity of the WQARF Sites have the potential to be impacted, a groundwater RO is necessary that will *protect* these wells from any future impact from contamination at the WQARF Sites.<sup>1</sup>

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<sup>1</sup> The Proposed Remedial Objectives Report for 24<sup>th</sup> Street and Grand Canal contains two apparent typographical errors. Under Section 3.2 – Groundwater Remedial Objective – the RO refers in two separate places to “contamination associated with the 32<sup>nd</sup> Street and Indian School Road WQARF site ...” (emphasis added). SRP believes ADEQ intended to state “contamination associated with the 24<sup>th</sup> Street and Grand Canal WQARF site ...” Accordingly, SRP believes the provisions should be revised.

Conversely, ADEQ did not propose any surface water ROs for the WQARF Sites. The Proposed RO reports state: "...ROs for surface water use are not necessary, as ROs for groundwater pumped into the canal address protection of this use." SRP does not agree with this statement and strongly believes that both groundwater and surface water ROs should be adopted for the WQARF Sites. As discussed in the aforementioned SRP comment letters dated May 6, 2019, SRP groundwater production wells 16E-6.8N and 17E-8N are located in proximity to the WQARF Sites and discharge to the Grand Canal either directly or via distribution laterals off the Arizona Canal. As ADEQ is aware, the Grand Canal is a Water of the State and SRP maintains a policy that prohibits wells to discharge into canals if the water does not meet applicable standards for the receiving water body. Consistent with Arizona Pollutant Discharge Elimination System (AZPDES) permit #AZ0024341, wells discharging into canals that feed municipal drinking water systems must not exceed established drinking water standards for volatile organic compounds. Thus, SRP believes it is necessary for ADEQ to include ROs for surface water that not only *protect* against the loss or impairment, but also restore, replace or otherwise provide a water supply in the event contamination from the WQARF Sites impact SRP canal waters.

- ADEQs response: With regard to the three requests by SRP:
  - 1) SRP has previously communicated to ADEQ that it has entered into an agreement that may result in pumped groundwater from areas near WQARF Sites being included in the raw drinking water supply for the City of Goodyear. ADEQ has discussed the future use of the canal in Section 7.0 of the Draft and Final Remedial Investigation Report. The intended use of the canal was also acknowledged in the Land and Water Use Study Report (appendix E of the Draft and Final Remedial Investigation Report) and in Section 3.0 of the Draft and Final Remedial Objectives Report. In the Final Remedial Objectives Report, the groundwater remedial objective for potable use is written to protect, restore, replace, or otherwise provide for the use of groundwater at the Site for drinking water. This remedial objective accounts for the foreseeable use of SRP groundwater wells to discharge to a canal used for drinking water.
  - 2) Per SRP's request, ADEQ has modified the ROs to more closely reflect the regulatory language in Arizona Administrative Code § R18-16-406.I.4.
  - 3) As stated in the final RO Report (Appendix I of the Final Remedial Investigation Report), an RO for surface water use is not necessary, as contamination from the site has no direct connection to surface water. The RO for groundwater use protects the use of groundwater wells to discharge to a canal that may be used to provide drinking water.

## **Attachment B**

### **COPIES OF WRITTEN COMMENTS RECEIVED**



**City of Phoenix**  
OFFICE OF ENVIRONMENTAL PROGRAMS

May 30, 2019

Arizona Department of Environmental Quality  
Waste Programs Division  
Mr. Matt Narter  
400 West Congress, Suite 433  
Tucson, Arizona 85701

Re: Comments regarding the Draft Remedial Objective Report (RO) for the East Central Phoenix 32<sup>nd</sup> Street and Indian School Water Quality Assurance Revolving Fund (WQARF) prepared by the Arizona Department of Environmental Quality (ADEQ) on May 2, 2019.

Dear Mr. Narter,

The City of Phoenix (City) has reviewed the above referenced draft RO for 32<sup>nd</sup> Street and Indian School WQARF site.

The City agrees with the proposed RO's that ADEQ has written for soil, irrigation and potable groundwater. The RO for groundwater indicates that ADEQ acknowledges the important resource groundwater is for the City and the future of our citizens.

The City looks forward to working with ADEQ on the feasibility study and development of the proposed remedy for this site. If ADEQ would like to discuss these comments, please contact me at 602-256-5681.

Sincerely,

A handwritten signature in blue ink, reading "Julie Riemenschneider". The signature is fluid and cursive, with a large initial "J" and "R".

Julie Riemenschneider  
Environmental Programs Coordinator  
Office of Environmental Programs, City of Phoenix

C: Tina LePage, ADEQ (electronic copy)  
Scott Greene, ADEQ (electronic copy)  
Nancy Allen, OEP (electronic copy)  
Cynthia Campbell WSD (electronic copy)  
Alexander Richards, WSD (electronic copy)  
Elizabeth Zima, OEP (electronic copy)



Andrea Martinez, Water Quality &  
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Andrea.Martinez@srpnet.com

May 31, 2019

***Via Electronic Mail***

To: Matt Narter  
Project Manager  
Waste Programs Division  
Arizona Department of Environmental Quality  
400 W. Congress St. Suite 433  
Tucson, AZ 85701  
Email: narter.matthew@azdeq.gov

Reference: Proposed Remedial Objective Report for 24<sup>th</sup> Street and Grand Canal Water Quality Assurance Revolving Fund Site; and Proposed Remedial Objective Report for 32<sup>nd</sup> Street and Indian School Road Water Quality Assurance Revolving Fund Site – Phoenix, AZ

**RE: Salt River Project Comments – Proposed Remedial Objectives Reports for 24<sup>th</sup> Street & Grand Canal and 32<sup>nd</sup> Street and Indian School Road WQARF Sites**

Salt River Project Agricultural Improvement and Power District (SRP) appreciates the opportunity to provide comments on the Proposed Remedial Objectives (RO) reports published May 2, 2019, for the 24<sup>th</sup> Street and Grand Canal and the 32<sup>nd</sup> Street and Indian School Road Water Quality Assurance Revolving Fund (WQARF) sites located in Phoenix (WQARF Sites). SRP has reviewed both RO reports and respectfully requests that the Arizona Department of Environmental Quality (ADEQ):

- 1) Update the proposed RO reports to specifically reflect the foreseeable SRP water use in proximity of the WQARF Sites.
- 2) Maintain the proposed groundwater irrigation use and potable use ROs for the WQARF Sites but include an RO that will *protect* against loss or impairment of SRP wells in the vicinity of the WQARF Sites.
- 3) Include surface water ROs for the WQARF Sites.



## SRP's Foreseeable Water Uses

As ADEQ is aware, SRP provides water to its customers in the Phoenix area through a series of canals and laterals. In 2017, SRP entered into an Agreement with the City of Goodyear to wheel Goodyear's surface water supplies to the future Goodyear WTP. Although the water delivered to Goodyear will primarily be Goodyear's surface water supplies, from an operational perspective, some of that water may be physically comingled with groundwater from SRP production wells located near the WQARF Sites. Once the Goodyear WTP is completed, the designated use of groundwater wells in and around the WQARF Sites will include both irrigation and raw drinking water supply. As a practical matter, pumped groundwater from around the WQARF Sites may also be included in the raw drinking water supply for Goodyear.

This matter is discussed in more detail in SRP's comment letters for the Draft Remedial Investigation (RI) reports for the WQARF Sites (*RE: Salt River Project Comments – Draft Remedial Investigation Report for 24<sup>th</sup> Street and Grand Canal WQARF Site* and *RE: Salt River Project Comments – Draft Remedial Investigation Report for 32<sup>nd</sup> Street and Indian School WQARF Site*, both dated May 6, 2019). It is important that ADEQ take this matter into consideration when finalizing the ROs for the WQARF Sites. It is SRP's expectation that the ROs will accurately reflect and protect SRP's current and foreseeable water use.

## SRP Supports Groundwater and Surface Water ROs

SRP is appreciative that ADEQ proposed groundwater ROs for both irrigation use and potable water use at the WQARF Sites. SRP believes that both RO types are appropriate in light of the current and reasonably foreseeable use of groundwater in the area, and the presence of tetrachloroethylene (PCE) contamination hotspots that remain at the WQARF Sites and exceed the Aquifer Water Quality Standards (AWQS). In the event that PCE or trichloroethylene (TCE) levels exceed drinking water standards when the Goodyear WTP becomes operational, SRP expects that appropriate contingency measures, such as wellhead treatment, will be implemented to allow continued operation of the SRP wells.

SRP requests that ADEQ modify the ROs to more closely track the regulatory language in Ariz. Admin. Code § R18-16-406.I.4. For example, and more specifically, ROs are intended, among other things, to “protect against the loss or impairment of each listed use that is threatened to be lost or impaired as a result of the release of a hazardous substance.” (Ariz. Admin. Code § R18-16-406.I.4.a.) Notably, the ROs as drafted do not address the regulatory requirement for protection against loss or impairment. Because multiple SRP wells in vicinity of the WQARF Sites have the potential to be impacted, a groundwater RO is necessary that will *protect* these wells from any future impact from contamination at the WQARF Sites. <sup>1</sup>

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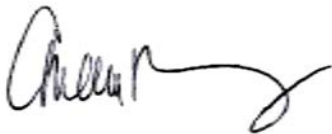
<sup>1</sup> The Proposed Remedial Objectives Report for 24<sup>th</sup> Street and Grand Canal contains two apparent typographical errors. Under Section 3.2 – Groundwater Remedial Objective – the RO refers in two separate places to “contamination associated with the 32<sup>nd</sup> Street and Indian School Road WQARF site ...” (emphasis added). SRP believes ADEQ intended to state “contamination associated with the 24<sup>th</sup> Street and Grand Canal WQARF site ...” Accordingly, SRP believes the provisions should be revised.

Conversely, ADEQ did not propose any surface water ROs for the WQARF Sites. The Proposed RO reports state: "...ROs for surface water use are not necessary, as ROs for groundwater pumped into the canal address protection of this use." SRP does not agree with this statement and strongly believes that both groundwater and surface water ROs should be adopted for the WQARF Sites. As discussed in the aforementioned SRP comment letters dated May 6, 2019, SRP groundwater production wells 16E-6.8N and 17E-8N are located in proximity to the WQARF Sites and discharge to the Grand Canal either directly or via distribution laterals off the Arizona Canal. As ADEQ is aware, the Grand Canal is a Water of the State and SRP maintains a policy that prohibits wells to discharge into canals if the water does not meet applicable standards for the receiving water body. Consistent with Arizona Pollutant Discharge Elimination System (AZPDES) permit #AZ0024341, wells discharging into canals that feed municipal drinking water systems must not exceed established drinking water standards for volatile organic compounds. Thus, SRP believes it is necessary for ADEQ to include ROs for surface water that not only *protect* against the loss or impairment, but also restore, replace or otherwise provide a water supply in the event contamination from the WQARF Sites impact SRP canal waters.

SRP appreciates the opportunity to provide these comments to ADEQ and reserves its right to provide additional comments once these concerns are addressed.

If you have any questions, please call me at 602-236-2618.

Sincerely,



Andrea Martinez  
Water Quality & Waste Management Services Manager

cc: Bob Pane, SRP  
Karis Nelson, SRP