

**Highway 260 and Johnson Lane
Water Quality Assurance Revolving Fund (WQARF) Site
Community Advisory Board (CAB)**

**Wednesday, November 14, 2018
5:30 p.m. – 7:30 p.m.
Timber Mesa Fire Department Building
2922 W White Mountain Blvd.
Lakeside, Arizona 85929**

MEETING MINUTES

CAB Members Present: Lee Hetrick, Matt Patterson, Barbara Teague, Donald Earl, Keith Johnson, Raymond Kary and Mark Exline

CAB Members Absent: None

ADEQ Staff Present: Alyssa Rosewood; Community Involvement Coordinator, Matt Narter; Project Manager, Haley Holtgrieve; Environmental Scientist

Members of Public Present: Robert Douglas; Navajo County, Steve Sutherland; Pinyon Environmental, Ervin Earl

1. Call to Order/Introductions

Ms. Alyssa Rosewood called the meeting to order at 5:35 pm. Introductions did not take place.

2. Acceptance/Changes to February 5, 2018 CAB Meeting Minutes

Mr. Matt Patterson motioned to approve minutes as is, seconded by Mr. Keith Johnson, motion passed.

3. Presentation by ADEQ of Recent Site Related Activities– Matthew Narter (see attached presentation)

4. Presentation by ADEQ of the Highway 260 and Johnson Lane Draft Remedial Investigation (RI) Report – Matthew Narter (see attached presentation)

Discussion of how plume is better estimated as ADEQ has filled in data gaps. Discussion of drilling of monitoring wells, geology around wells, and groundwater in area. Discussion of soil gas sampling, risk to indoor air, locations of highest soil gas results, and ADEQ's conclusion

that vapor intrusion is not of concern for this site. Mr. Narter discussed storm water drain blockage, its creation of flooding and it possibly leading to the potential contamination of groundwater aquifer. Discussion of leak in dry cleaners, repair of leak and belief that this is not active contamination. Discussion of lake sampling as well as sampling of private wells. ADEQ worked with private well owners to install treatment systems on contaminated wells.

Mr. Ray Kary inquired as to what cost to date is for this site and if the high school plays a role in this site. Mr. Narter confirmed that the school is a separate site, which was delisted. Mr. Narter confirmed that monitored natural attenuation can be a potential remedy selected for a site. Semiannual sampling will continue to determine concentration trends. More sampling may occur if needed for feasibility study.

5. Discussion by the Board of the ADEQ Presentation

Mr. Patterson added that the feasibility study is where cleanup options are identified, which can be very easy to complex ideas. Mr. Patterson wanted to clarify that there is not a lot that can be done until the feasibility study is completed.

6. CAB and Public Comment on Draft RI Report

Mr. Lee Hetrick requested that cost to date of site be provided to CAB and that request be reflected in minutes. Mr. Hetrick thanked Mr. Narter for his responsiveness with questions asked prior to the CAB meeting.

No CAB or public comments on the draft RI report were received.

7. CAB and Public Solicitation of Remedial Objectives (see attached presentation)

Mr. Narter highlighted that ROs are broad and provide structure while the feasibility is more specific, looking into cost and other factors.

Mr. Mark Exline confirmed that ADEQ will make the final decision on the cleanup method for the site. Mr. Exline inquired as to weight of CAB on ADEQ's clean-up method chosen, if CAB voted they did not want active clean up to occur. Mr. Narter confirmed that CAB and public input is taken into consideration and confirmed that if ADEQ chooses a different cleanup option than what is desired by CAB, it will be presented to CAB and the public as to why that method was chosen. Mr. Exline clarified with Mr. Narter that the spill is relatively minor, that current treatment on private wells is working, contamination is not ongoing, and that sampling will occur in the future to ensure plume is not changing.

Mr. Keith Johnson voiced his preference for a plan that did clean up the contamination, as did Ms. Barbara Teague.

Mr. Johnson indicated his desire to be provided contact information or follow-up information on the UST tank believed to be leaking near the Circle K.

Mr. Narter indicated desire to have public notice for the draft RO report published within the next two weeks.

8. CAB Charter Update, Discussion and Vote

Ms. Rosewood discussed standard language updates, shown with track changes. Mr. Patterson motioned to adopt charter with a minimum of five CAB members and maximum of nine members, and all changes as presented. Mr. Johnson seconded, motion passed.

9. Future CAB Meeting/Agenda Discussion

The next CAB meeting is tentatively scheduled for spring 2019, depending on the status of the feasibility study. Request to have discussion on remedial objectives and feasibility study.

Mr. Patterson inquired about how PCE can be removed from groundwater and expressed interest in having Mr. Narter follow-up with the Town on how watering roads, etc. can be used to help draw contaminated water out of the aquifer.

10. Adjournment

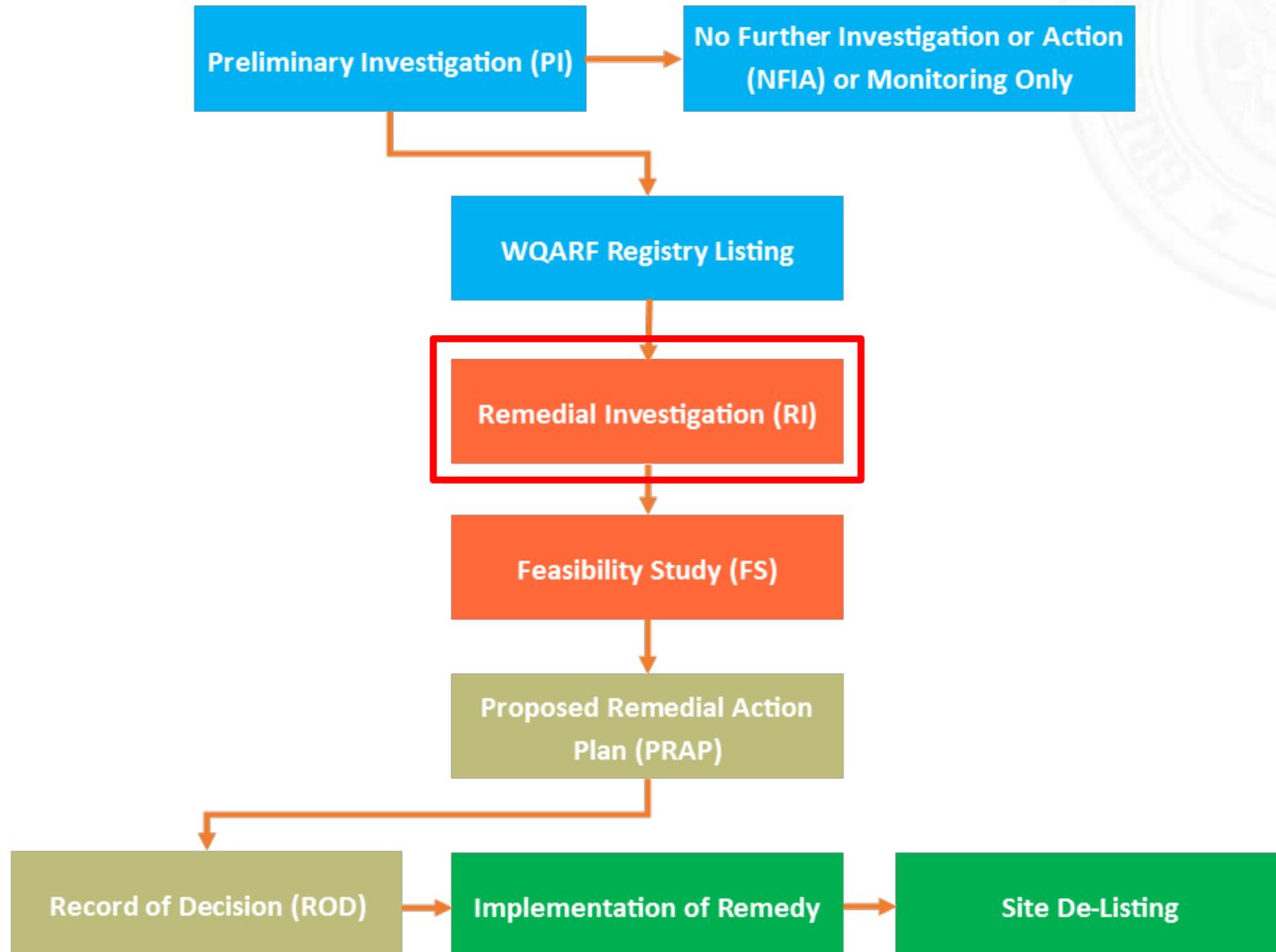
Mr. Kary motioned to adjourn, seconded by Mr. Patterson, meeting adjourned at 7:10 pm.



Highway 260 and Johnson Draft Remedial Investigation Report

November 14, 2018





R18-16-406 (A)

The remedial investigation for a site or portion of a site shall:

1. Establish the nature and extent of the contamination and the sources thereof,
2. Identify current and potential impacts to public health, welfare, and the environment,
3. Identify current and reasonably foreseeable uses of land and waters of the state, and
4. Obtain and evaluate any other information necessary for identification and comparison of alternative remedial actions

Conceptual Site Model:

A representation of the processes that control the transport, migration, and impacts of contamination.

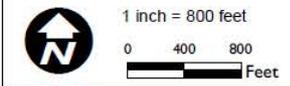
- Background Investigation
- Groundwater Flow and Transport
- Geology
- Source Identification
- Risk Analysis

Site Background



Legend

- Source Area
- Key Off-Site Properties



Pinyon

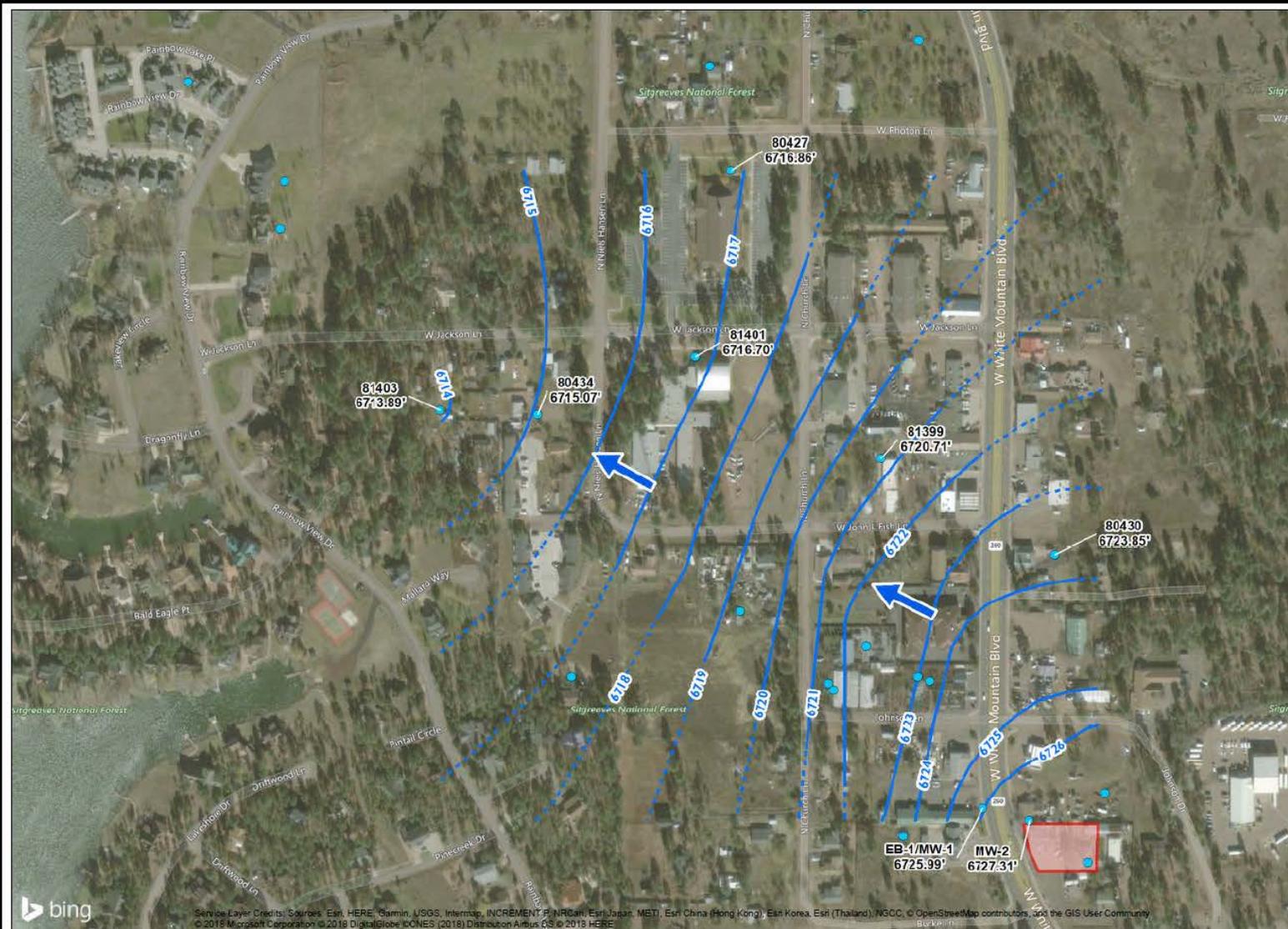
SITE LAYOUT
Highway 260 and Johnson Lane
Pinetop-Lakeside, Arizona

Site Location: Section 26, Township 9N, Range 22E, Gila and Salt River Meridian
Pinyon Project Number: 7/17-1006-04.5203

Drawn By: JAF Figure: 3
Reviewed By: CRF Date: 6/11/2018

Document Path: Z:\PROJ\ECT\2017\717100604 ADEQ 260 and Johnson Lane\figs\mxd\Map\717100604_Site Layout.mxd

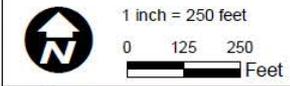
Groundwater Flow



Legend

- Monitoring Well
- Groundwater Elevation (ft)
- ➔ Approximate Groundwater Flow Direction
- Source Area

Notes:
ft - feet
Groundwater elevation measurements from 81397, 81398, and 80432 were not included in the interpolation.



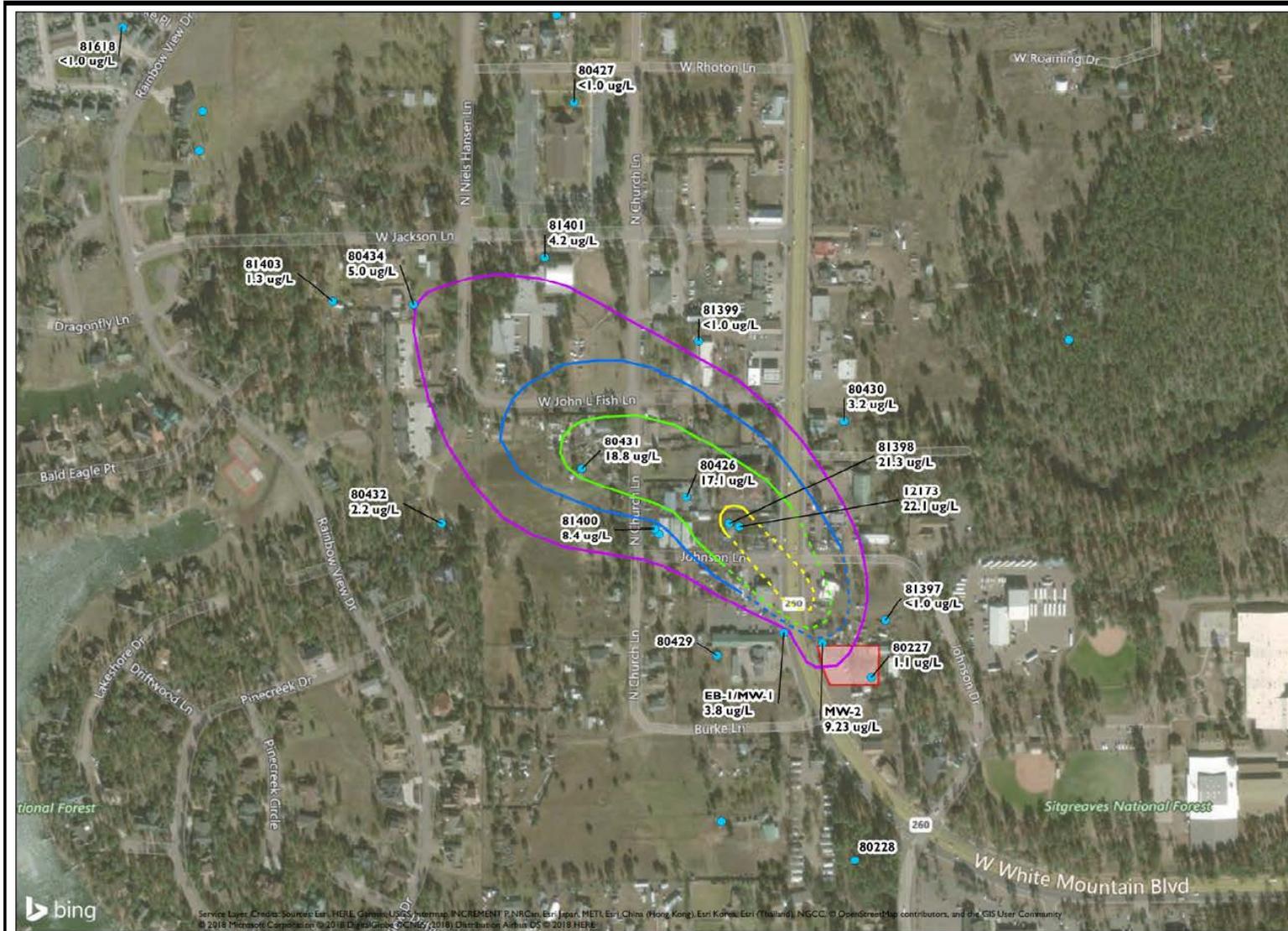
Pinyon
GROUNDWATER ELEVATION AND POTENTIOMETRIC SURFACE
MARCH 2018
Highway 280 and Johnson Lane
Pinetop-Lakeside, Arizona

Site Location: Section 26, Township 9N, Range 22E, Gila and Salt River Meridian
Pinyon Project Number: 7/17-1006-04.5203

Drawn By: JAF Figure: 12
Reviewed By: CRF Date: 8/17/2018

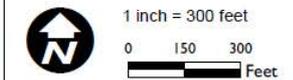
Document Path: Z:\PROJ\CT02017\71710064 ADEQ 280 and Johnson Lane\Figures\AcMap\MW\KAR\SM12_006 Map18.mxd

Groundwater Contaminant Transport



Legend

- Monitoring Well Analytical Result
- PCE Concentration (ug/L)
 - 5
 - 10
 - 15
 - 20
- Source Area



Pinyon
PROJECTED PCE IMPACTS TO
GROUNDWATER - MARCH 2018
Highway 260 and Johnson Lane
Pinetop-Lakeside, Arizona

Site Location: Section 26, Township 9N, Range 22E, Gila and Salt River Meridian
Pinyon Project Number: 7/17-1006-04.5203

Drawn By: JAF Figure: 16
Reviewed By: CRF Date: 9/10/2018

Groundwater Contaminant Transport

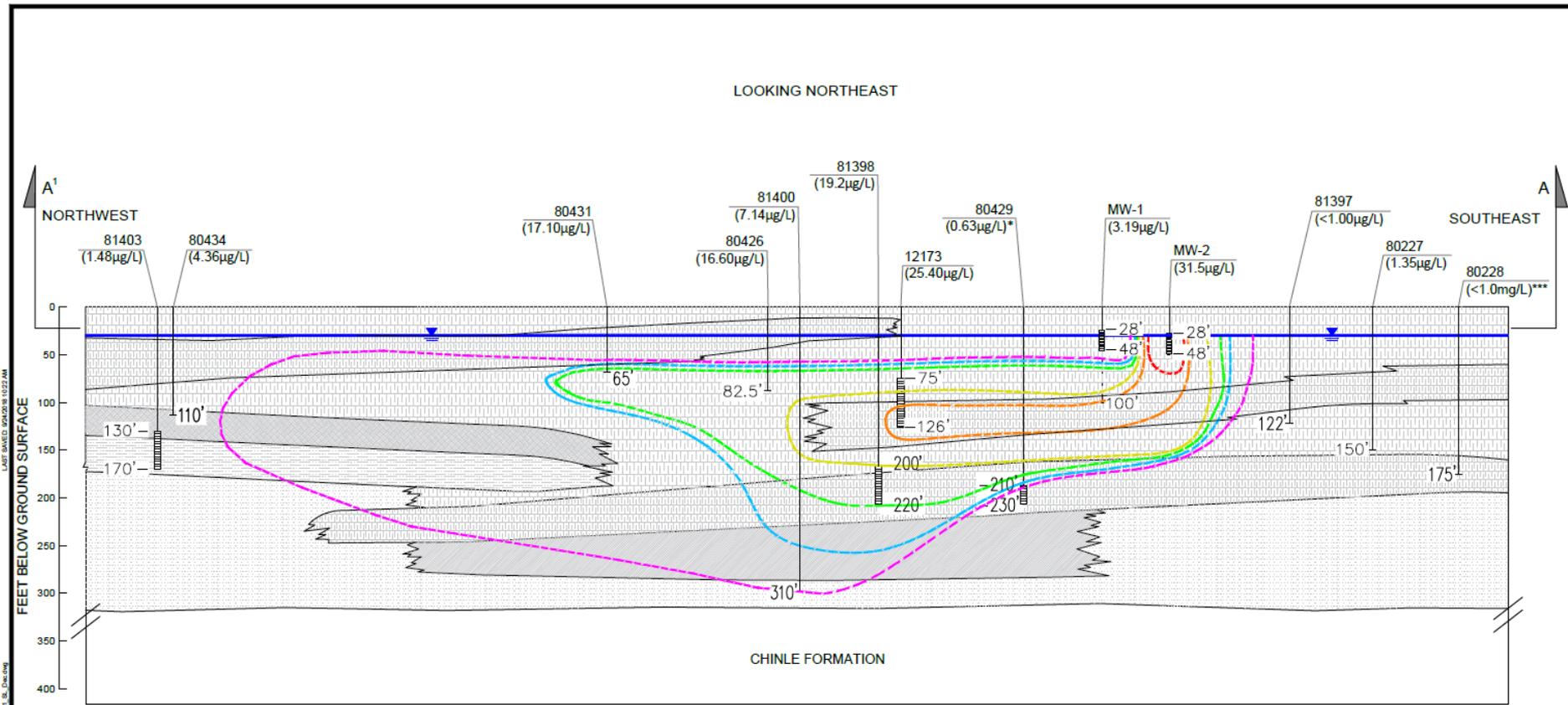


Figure from HYDRO GEO CHEM, INC. Date: 11/04/2015
Unit distributions are projected based on limited available information.

Cross sections location shown on Figure 5.

Horizontal Scale is Estimated based on Figure from HYDRO GEO CHEM, INC. Date: 11/04/2015

Dates:
* - 10/2016 XXµg/L = Isoconcentration Line
** - 2/2017 (XX) = Concentration of Tetrachloroethene in Micrograms
*** - 4/2017 per Liter (December 2017)

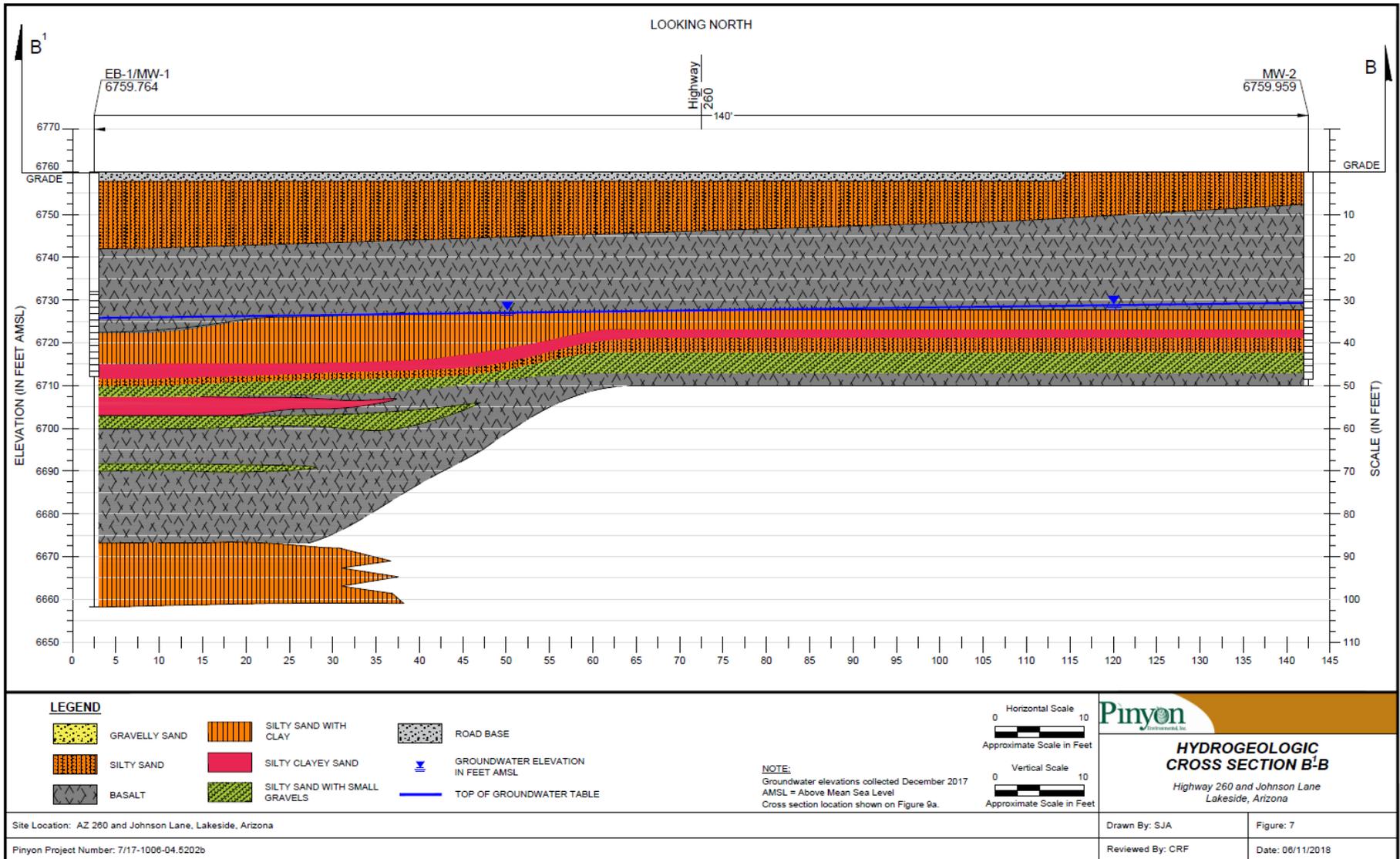
LEGEND WELL SCREEN INTERVAL (WHERE AVAILABLE) WELL IDENTIFICATION NAME SCREEN DEPTH	 SHALE	 GRAVEL-CLAY	 10µg/L - 14.9µg/L	 30µg/L - 35µg/L	
	 BASALT	 SANDSTONE	 15µg/L - 19.9µg/L	 GROUNDWATER ELEVATION (APPROXIMATE)	 TOP OF GROUNDWATER TABLE (APPROXIMATE)
	 CLAY AND SAND	 SANDSTONE + SHALE	 20µg/L - 24.9µg/L	 Vertical Scale 0 100 Approximate Scale in Feet	
	 BASALT + CINDERS	 5µg/L - 9.9µg/L	 25µg/L - 29.9µg/L		

VERTICAL GROUNDWATER PCE IMPACTS A-A
 December 2017
 Highway 260 and Johnson Lane
 Lakeside, Arizona

Site Location: AZ 260 and Johnson Lane, Lakeside, Arizona
 Pinyon Project Number: 7/17-1006-04.5202b

Drawn By: SJA
 Reviewed By: CRF
 Figure: 23
 Date: 09/24/2018

Local Geology



Z:\PROJECTS\2017\717100804 ADEQ 260 and Johnson Lane\Figures\AutoCAD\DWG\C301_SL.dwg

Source Identification

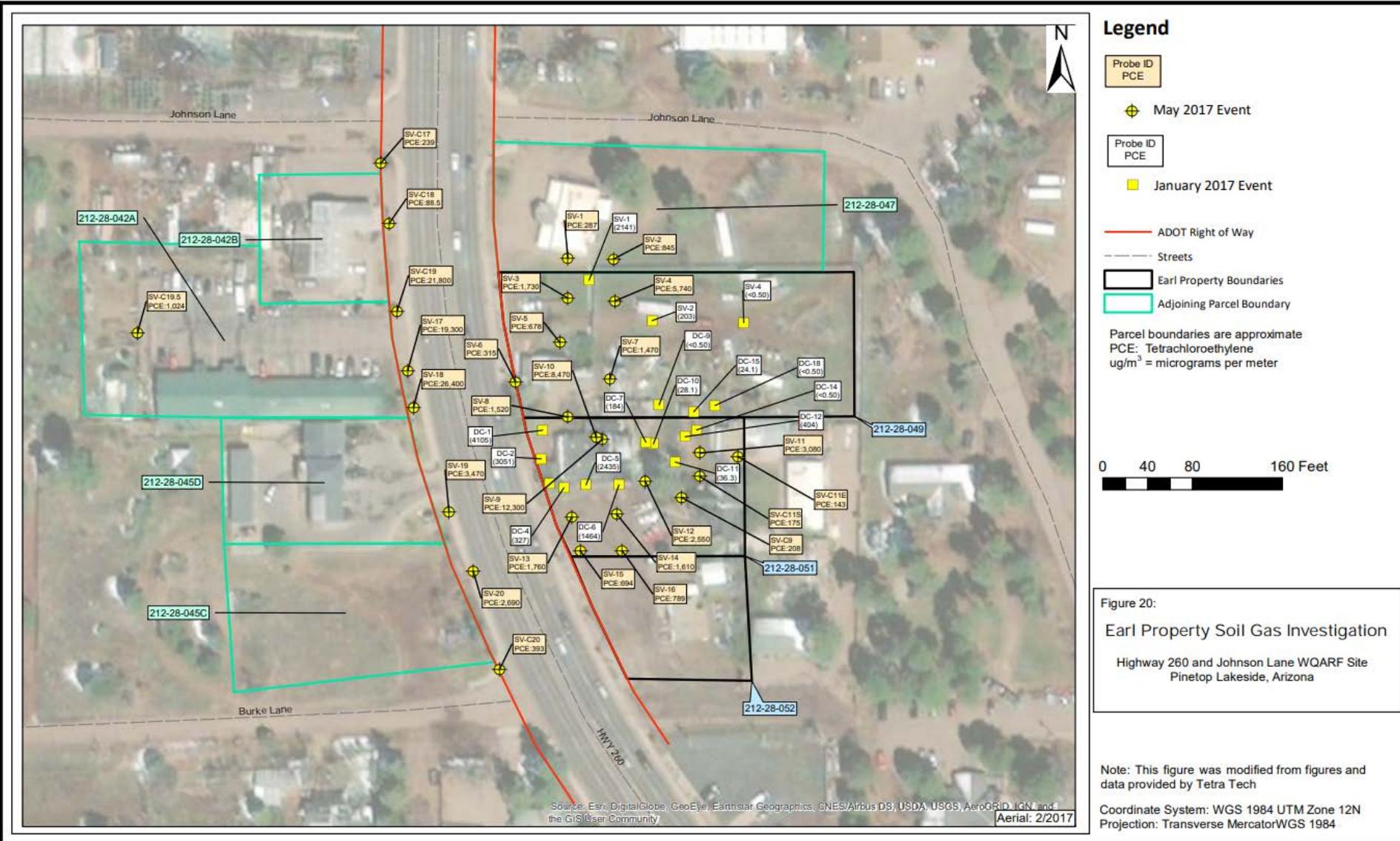


Figure 20:
Earl Property Soil Gas Investigation
Highway 260 and Johnson Lane WQARF Site
Pinetop Lakeside, Arizona

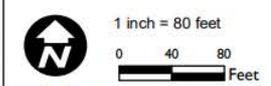
Note: This figure was modified from figures and data provided by Tetra Tech
Coordinate System: WGS 1984 UTM Zone 12N
Projection: Transverse Mercator WGS 1984

Source Identification



Legend

- Soil Gas Location**
Analytical Result
 - Source Area**
- Notes:
Units are micrograms per cubic meter
PCE = Tetrachloroethene



Pinyon
PCE SOIL GAS SAMPLING RESULTS
SEPTEMBER 2017
Highway 260 and Johnson Lane
Pinetop-Lakeside, Arizona

Site Location: Section 26, Township 9N, Range 22E, Gila and Salt River Meridian
Pinyon Project Number: 7/17-1006-04.5203

Drawn By: JAF Figure: 21
Reviewed By: CRF Date: 5/1/2018

Document Path: \\PINYON\B\compsys2\PROJ\CT1017\71710604 ADEQ 340 and Johnson Lane\GIS\Map\POD\AR\DP1_Soil Gas Locations.mxd

- Several potential exposure pathways were identified and evaluated during the remedial investigation, including:
 - Groundwater
 - Surface Water
 - Soil
 - Vapor Intrusion

- Ingestion of groundwater by private well owners was identified as the only substantial risk.

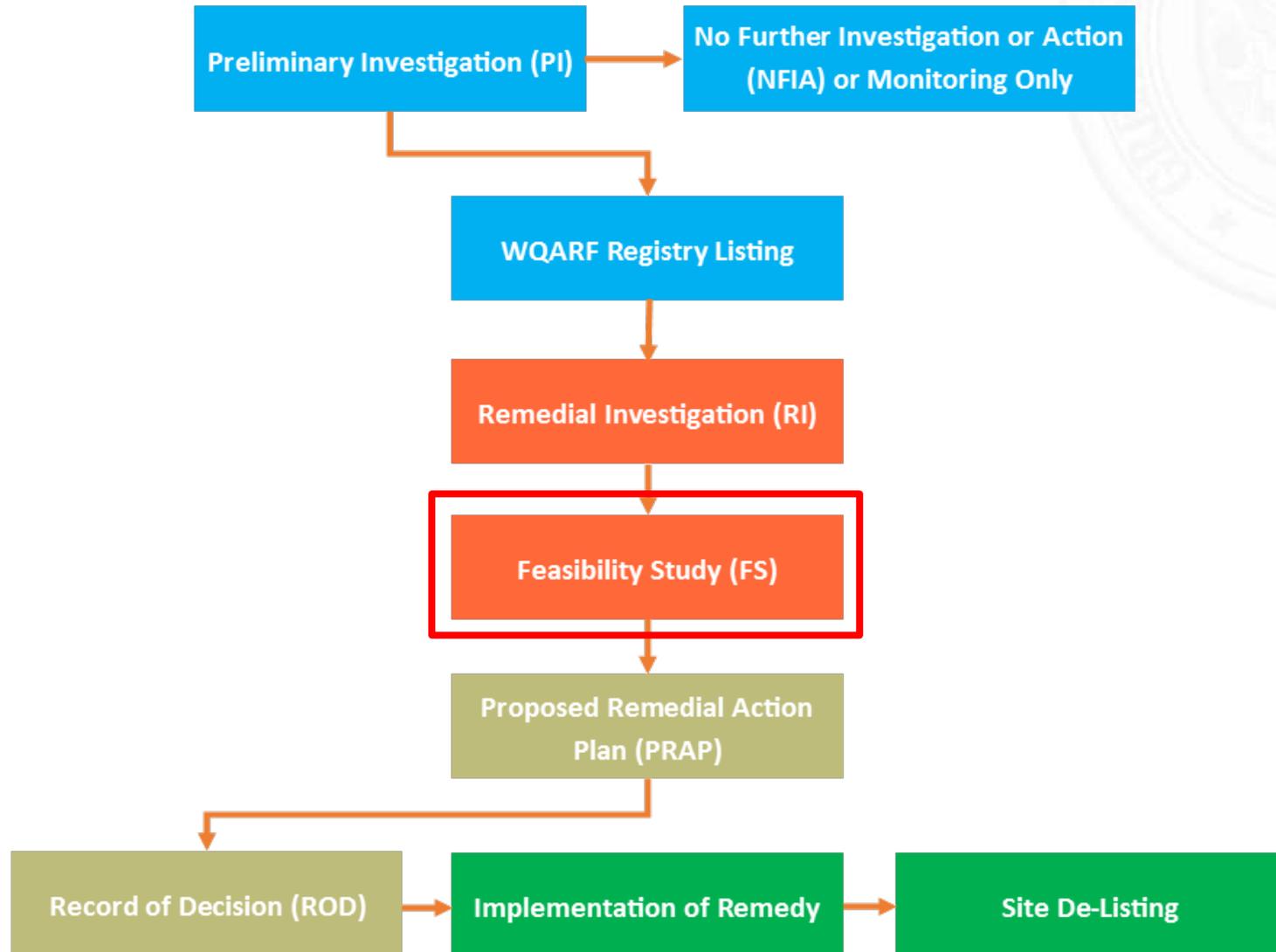
- Soil-gas and groundwater sampling results support the conclusion that a PCE release occurred at the former dry cleaner. (R18-16-406A 1,4)
- Soil boring logs and groundwater data indicate the PCE groundwater plume is fully delineated. (R18-16-406A 1-2,4)
- Groundwater data collected from May 2015 to March 2018 indicate the plume is not expanding and PCE concentrations are not increasing. (R18-16-406A 1-2,4)
- Point-of-use filtration is in place for all potential receptors to groundwater; no other potential pathways are expected to harm human health. (R18-16-406A 2)
- Land and Water Use Study has been completed (R18-16-406A 3)

- 60-day public comment period on the draft RI report ends on November 27, 2018
- **How to comment:**
 - **By Email:**

mn3@azdeq.gov
 - **By Mail** (*Must be postmarked by November 27, 2018*):

Arizona Department of Environmental Quality
Waste Programs Division
Attention: Matthew Narter
400 W Congress, Suite 433
Tucson, AZ 85701

Upcoming Work



Contact Us!

Matt Narter, Project Manager

(520) 770-3128

(800) 234-5677 ext. 5207703128

mn3@azdeq.gov

Alyssa Rosewood, Community Involvement Coordinator

(602) 771-4186

(800) 234-5677 ext. 6027714186

Rosewood.Alyssa@azdeq.gov



Questions?



Highway 260 and Johnson Remedial Objectives

November 14, 2018



Arizona Administrative Code R18-16-401

Remedial objective means the goal, as established through the process in R18-16-406, to be achieved by a remedy selected under this Article.

Arizona Administrative Code R18-16-406(I)(4)

The Remedial Objectives Report shall state the remedial objectives for each listed use in the following terms:

- a. Protecting against the loss or impairment of each listed use that is threatened by the release
- b. Restoring, replacing, or otherwise providing for each listed use
- c. Time frames when the action is needed
- d. The projected duration of the action needed

Soil

Calculated PCE concentrations in soil are below the residential Soil Remediation Level (RSL) and the Groundwater Protection Level (GPL).

Therefore, no ROs for soil are necessary for the Site.

Surface Water

Currently, surface water near the Site, including Rainbow Lake and Billy Creek, is not affected by contamination from the Site; therefore no ROs for the surface water are necessary.

Groundwater

To restore, replace or otherwise provide for water for the designated use, lost or impaired by contamination associated with the Highway 260 and Johnson Lane WQARF site. This action will be needed as long as the need for the water exists, the resource remains available and the contamination associated with the Highway 260 and Johnson Lane WQARF site prohibits or limits the use of groundwater.

Input on Remedial Objectives from the CAB and/or public?

- **30-day comment period to begin with the notice of availability of the draft RO Report.**
- **How to comment:**

- **By Email:**

mn3@azdeq.gov

- **By Mail:**

Arizona Department of Environmental Quality
Waste Programs Division
Attention: Matthew Narter
400 W Congress, Suite 433
Tucson, AZ 85701