



# Phoenix Goodyear Airport Superfund Site: Community Update

Community Information Meeting  
Estrella Mountain Home-Owners' Association:

June 6, 2012

Starpointe Residents Club

Goodyear, AZ



# Agenda

<b>6:00 p.m.</b>	<b>Introduction by Jerry Postema, City of Goodyear</b>
<b>6:20 p.m.</b>	<b>Presentation - EPA</b>
<b>6:45 p.m.</b>	<b>Questions</b>



## **Remedial Project Managers**

Catherine Brown, USEPA

Travis Barnum, ADEQ

## **Community Involvement Coordinators**

Viola Cooper, USEPA

Felicia Calderon, ADEQ

## **Community Outreach–Technical Advisory Grant Recipient**

Nadine Johnson

Environmental Community Outreach Association



# Is Your Drinking Water Safe?

- **Yes** - Water Supply wells are being protected by the remedy
  - Water Supply wells are screened deeper than contamination from PGA-N and PGA-S
  - Extraction and injection in the NE, Central and SW areas
  - Groundwater monitoring quarterly, monthly, bimonthly



# Is Your Soil Safe?

- **Yes** – There is no offsite soil contamination from PGA-N or PGA-S
- No vapor intrusion associated with PGA-N or PGA-S
  - Concentrations in groundwater are low offsite
  - Depth to groundwater is ~90 -120 feet
- Estrella Mountain Community is built on bedrock which has no contact with the alluvial basin where we are treating groundwater



## Why Is EPA Here?

- Groundwater contamination discovered in 1981
- PGA was placed on Superfund's national priority list in 1983
- Two very different Source Areas determined, PGA-North & PGA-South
- Remedy for both areas pump & treat for Groundwater, SVE for source areas



## PGA Stakeholders

- Residents
- CAG: 10+ years holding quarterly meetings
- Mayors: Goodyear, Avondale, Litchfield Park
- Water Providers: COG, COA, Liberty
- ADEQ: Keeping Governors, public informed
- EPA: Keeping Congress, public informed



# What is Phoenix-Goodyear Airport-North?

- US EPA Superfund Site located in Goodyear, Arizona
- Contaminants – Trichloroethene (TCE) and Perchlorate
- TCE Contamination in two Aquifers – Subunit A and Subunit C
- 100+ Monitor Wells
- 12 Extraction Wells
- 12 Injection Wells
- 5 Groundwater Treatment Systems



## How did PGA-N Contamination get there?

- Former Research and Development Facility (Unidynamics)
- Located at Van Buren and Litchfield Rd, Goodyear, Arizona
  - Department of Defense and Department of Energy Contracts
  - 1960's to 1980's
- Degreased metal parts with solvents
- Disposal of TCE/Perchlorate in Drywells (small quantities over time)
  - Migrated vertically to groundwater
- Became US EPA Superfund Site in 1983



# What is Phoenix-Goodyear Airport: South?

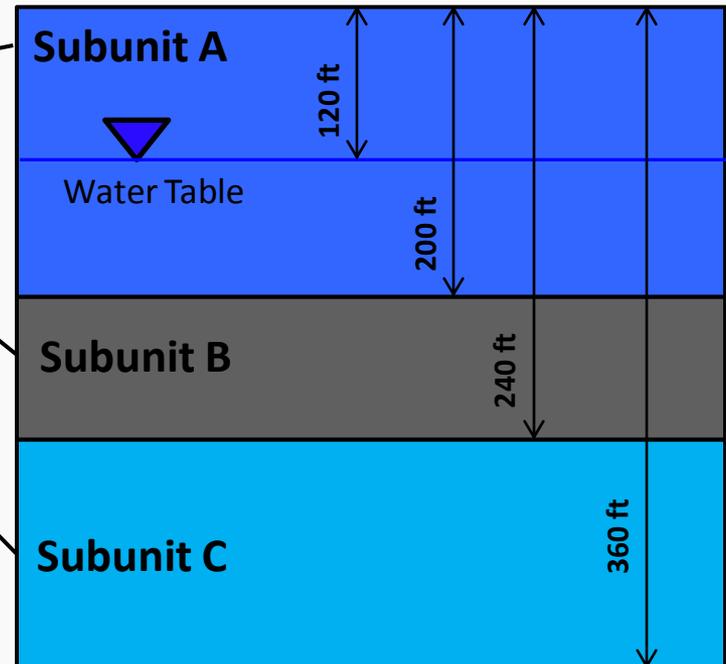
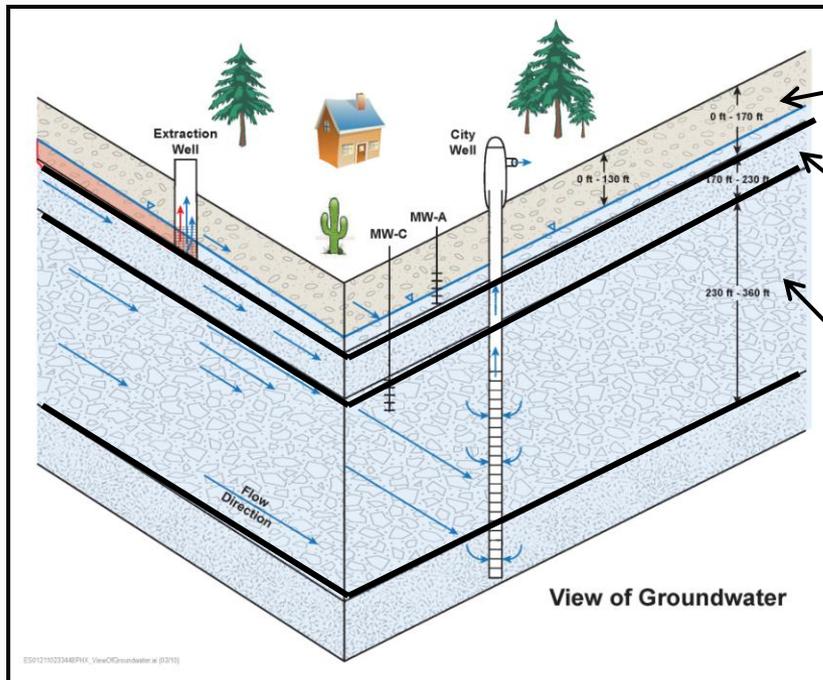
- US EPA Superfund Site located in Goodyear, Arizona
- Contaminants – Trichloroethene (TCE) and Chromium
- Contamination in two Aquifers – Subunit A and Subunit C and soil
- 100+ Monitor Wells
- 3 Extraction Wells
- 21 Injection Wells
- 3 Groundwater Treatment Systems



## How did PGA-S Contamination get there?

- Former Naval Air Station
- Located at Yuma and Litchfield Rd, Goodyear, Arizona
  - US Navy operated facility
  - 1947 to 1980's
- Degreasing aircraft metal parts with solvents
- Disposal of TCE/Chromium in Drainage ditch (small quantities over time)
  - Migrated vertically to groundwater
- Became US EPA Superfund Site in 1983

# Where is the Contamination at PGA?



- Subunit A – Comprised of sand and gravel dominant deposits. Contains majority of TCE contamination
- Subunit B – Comprised of silt/clay dominant deposits.
- Subunit C- Comprised of sand dominant deposits. TCE contamination limited south of I-10



## Stages of PGA Cleanup

- Both areas have remedial investigations underway which may result in changes to the selected remedies
- PGA-S investigating ways to compress the cleanup schedule
- PGA-N still investigating the nature & extent of GW contamination



# Why do we install wells in the PGA vicinity?

## **Monitor Wells**

- Define the extent of TCE in the aquifers.
- Monitor TCE concentrations to evaluate remedial system performance.
- Aid in determining aquifer properties and understanding of groundwater flow.

## **Extraction Wells**

- Remove TCE mass from groundwater.
- Provide hydraulic control of TCE.
- Protect Water Supply and Irrigation Wells.
- Restore the aquifer.

## **Injection Wells**

- Provide hydraulic control by creating a hydraulic barrier, thus controlling the direction of groundwater flow.
- Reduce the size of the TCE plume via dilution by injecting treated water.
- Protect Water Supply and Irrigation Wells.
- Replenish and Restore the aquifer for use by future generations.



# EPA Community Involvement

- Encourage and enable community members to get involved.
- Listen carefully to what the community is saying.
- Take the time needed to deal with community concerns.
- Change planned actions where community comments or concerns have merit.
- Keep the community well informed of ongoing and planned activities. Answer any and all questions.
- Explain to the community what EPA has done and why.



## Current Groundwater Plumes

- This slide is a placeholder for plume maps as PDFs from ITSI (under preparation)



**Questions?**



**Additional site related documents  
are available at:**

**[www.epa.gov/region09/phoenix-goodyearairport](http://www.epa.gov/region09/phoenix-goodyearairport)**



## For More Information

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# **Western Ave. Plume Water Quality Assurance Revolving Fund (WQARF)**

ADEQ-sponsored

Community Advisory Group (CAG)

Quarterly updates on PGA Superfund activities

Contact ADEQ

Felicia Calderon