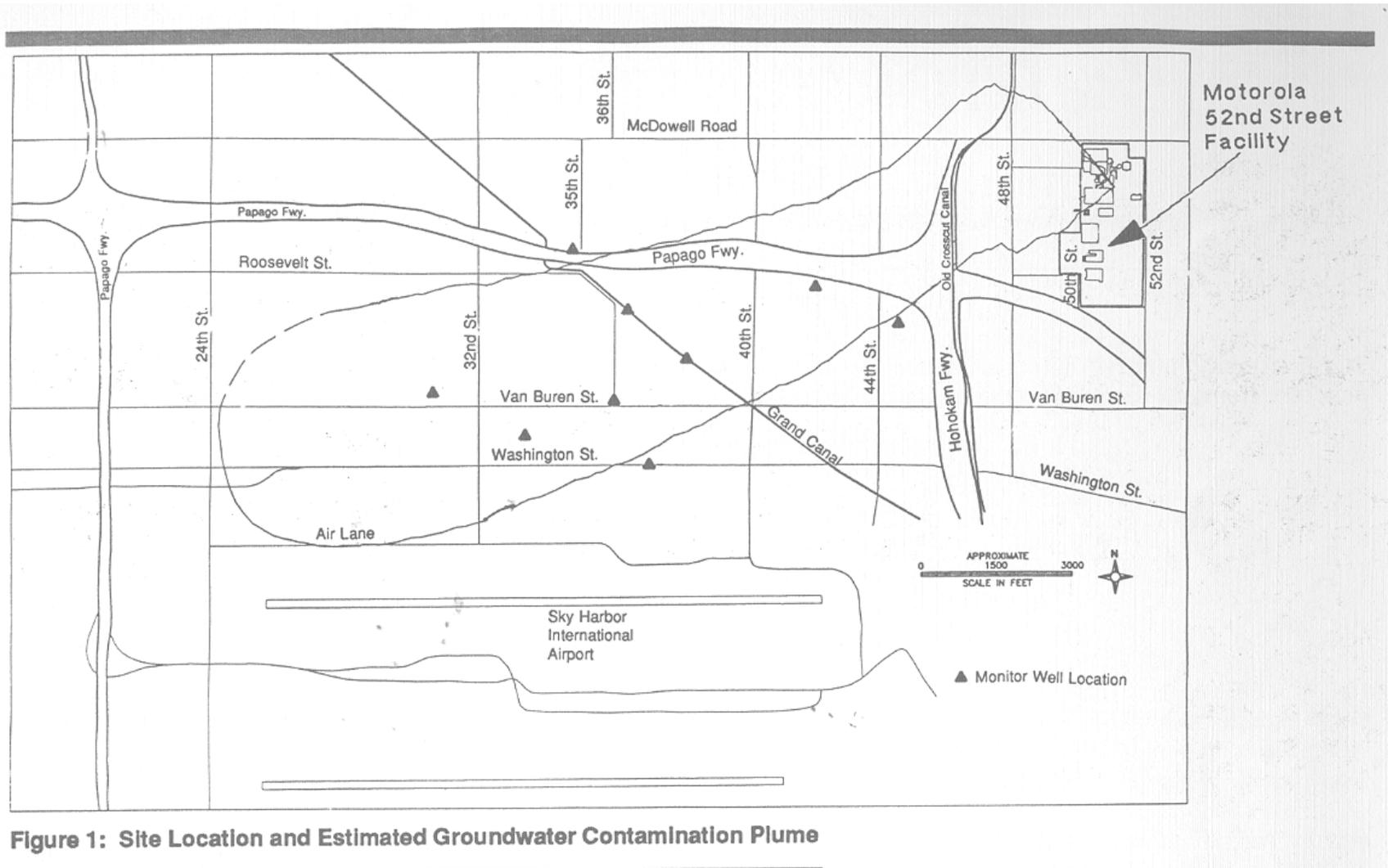


Motorola 52<sup>nd</sup> St. Superfund Site  
Overview  
May 2010

# History



1991 Plume map!

# Interim remedies: Treatment plants

OU1 pump and  
treat plant: 1992

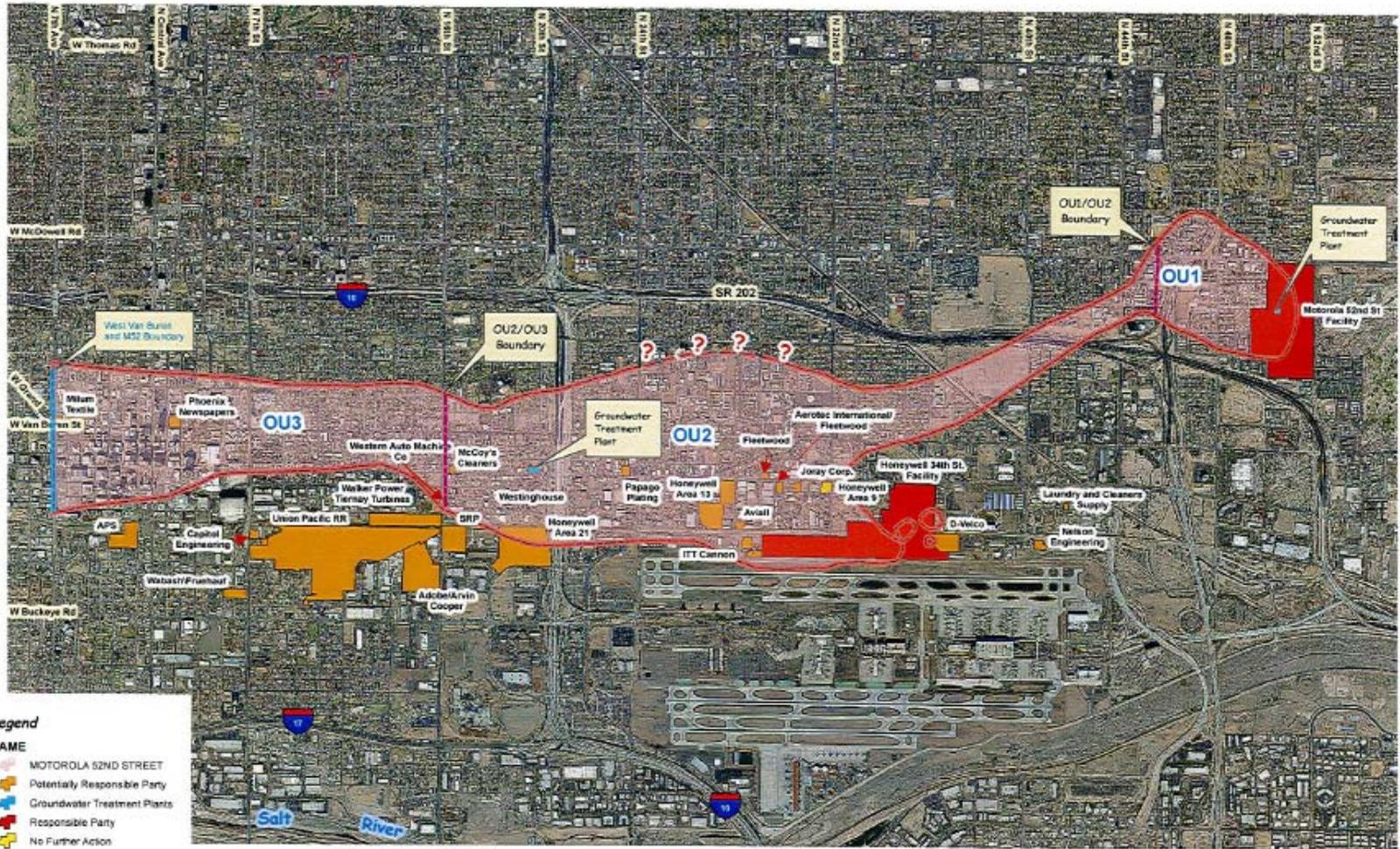
OU2 pump and  
treat plant: 2001



Both treatment plants send the treated water to beneficial use, such as manufacturing processes or irrigation

# Progress of treatment over time

## Draft updated plume map



**Legend**

**NAME**

- MOTOROLA 52ND STREET
- Potentially Responsible Party
- Groundwater Treatment Plants
- Responsible Party
- No Further Action

— Contour represents area of volatile organic compounds in alluvial and bedrock groundwater that exceed the Aquifer Water Quality Standards.

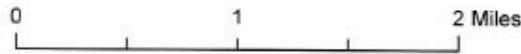
? = Insufficient Data

**Date of Plume Data: 2008**

WASTE PROGRAMS DIVISION  
GIS and Data Management Unit

Map produced by Arizona Department of  
Environmental Quality (ADEQ), GIS and  
Data Management Unit, TS Summers

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Projects2010\M52-2010\_5A.mxd

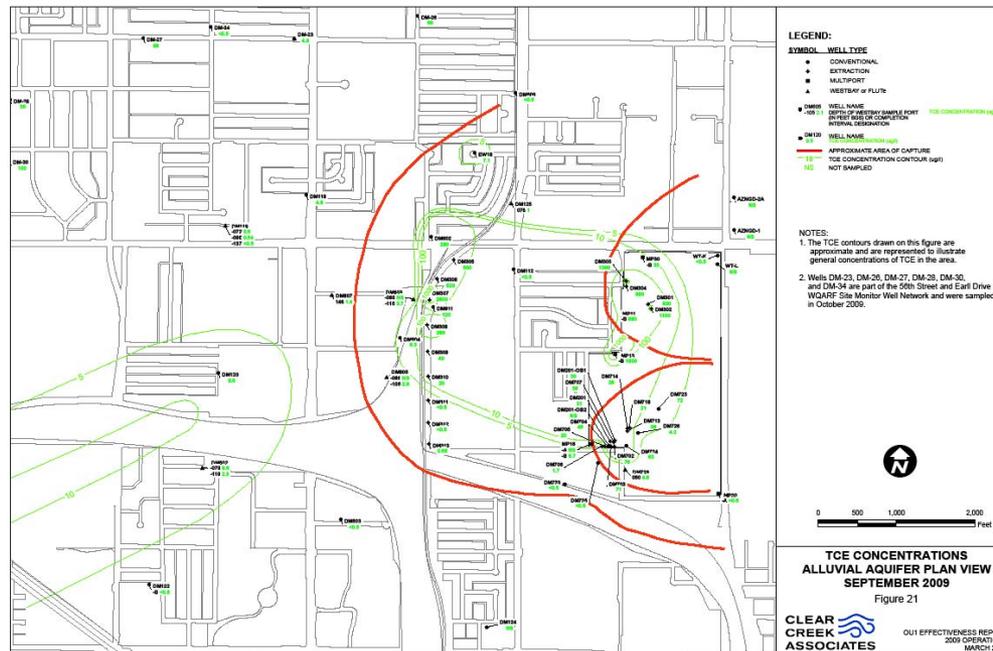
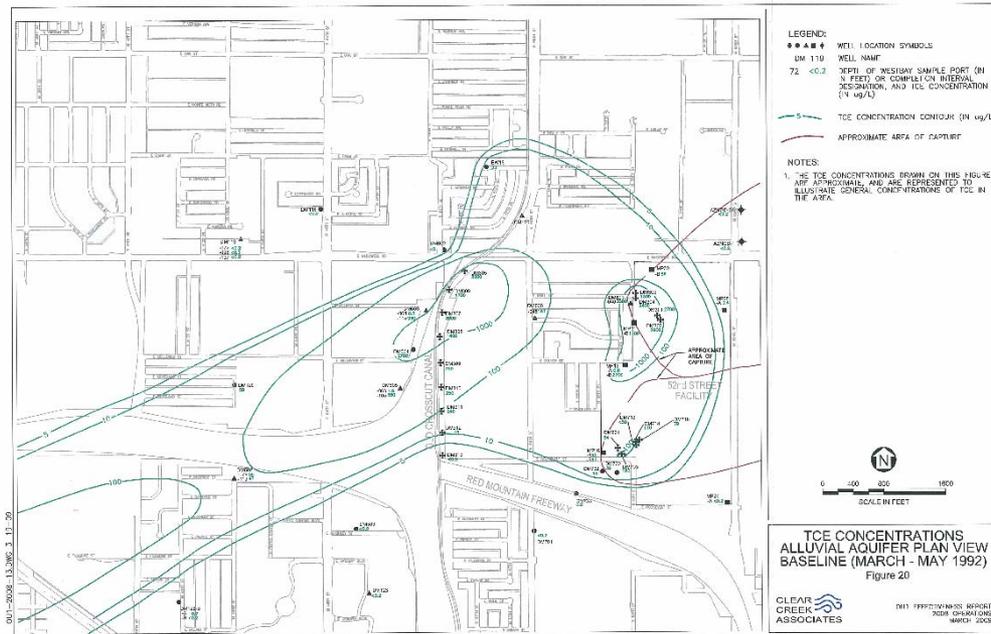


"Site boundaries depicted on this map represent ADEQ's interpretation of data available at the time the map was constructed. The map is intended to provide the public with basic information as to the estimated geographic extent of known contamination as of the date of map production. The actual extent of contamination may be different. Therefore, the geographic boundaries for this site may change in the future as new information becomes available."





# OU1 concentrations 1992 vs. 2009



# Effectiveness

## **OU1:**

As of 2009, 20,000 pounds of total VOCs have been removed.

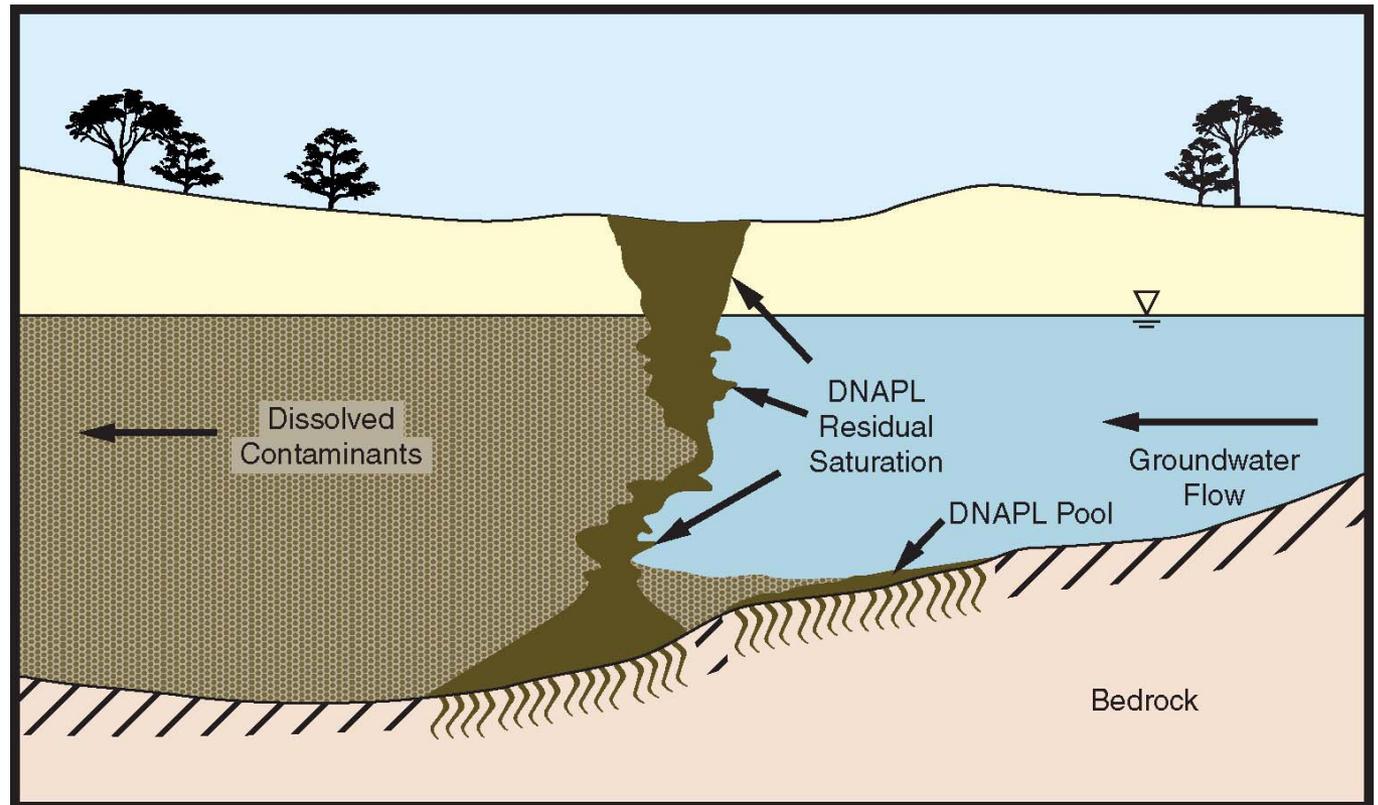
## **OU2:**

Removed over 11,500 pounds of VOCs since the system began operation in December 2001.

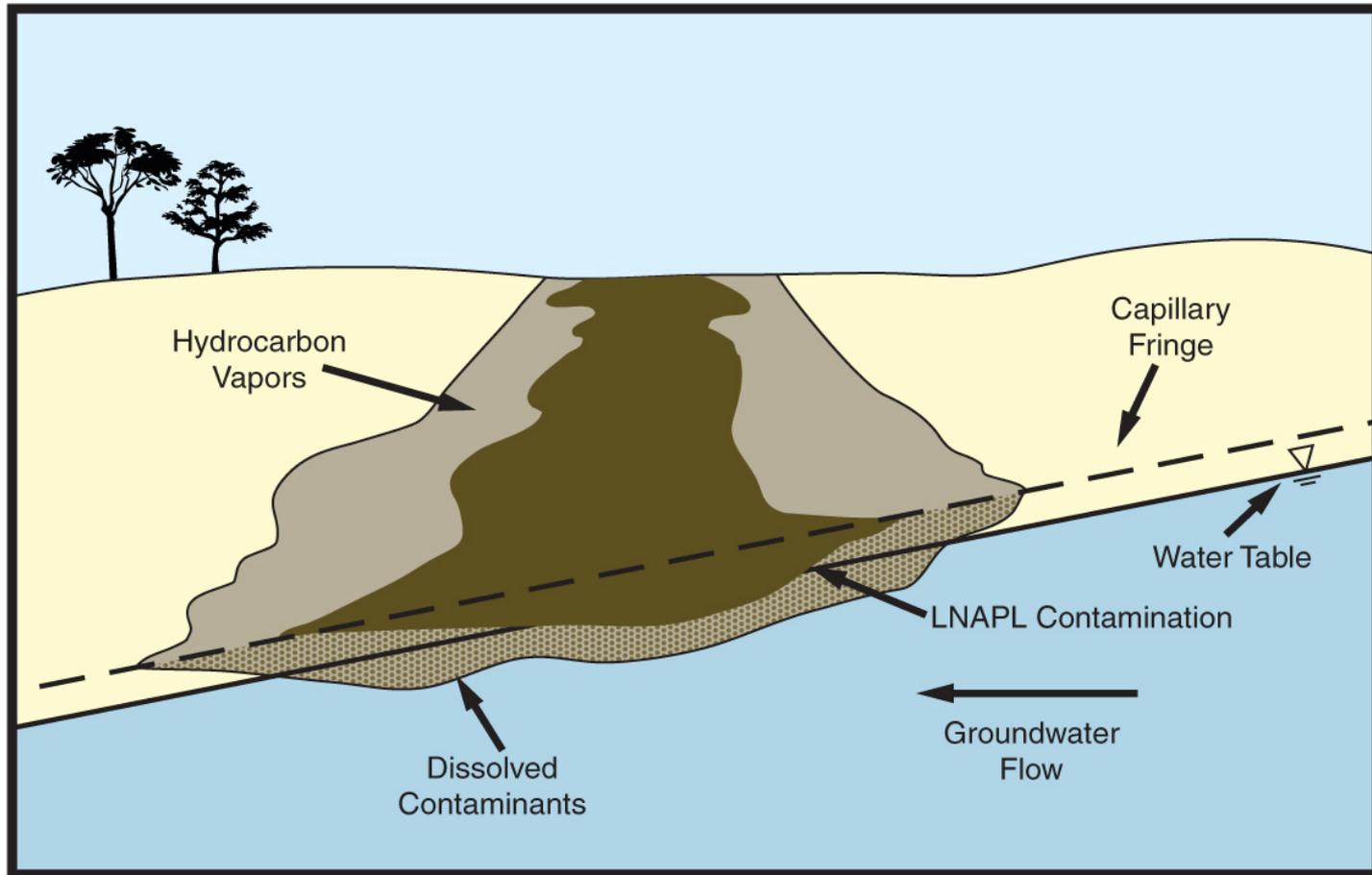
## **OU3:**

Because OU3 is “downstream” and the other OUs have been contained, concentrations have been going down consistently.

# DNAPL in Bedrock: the main challenge

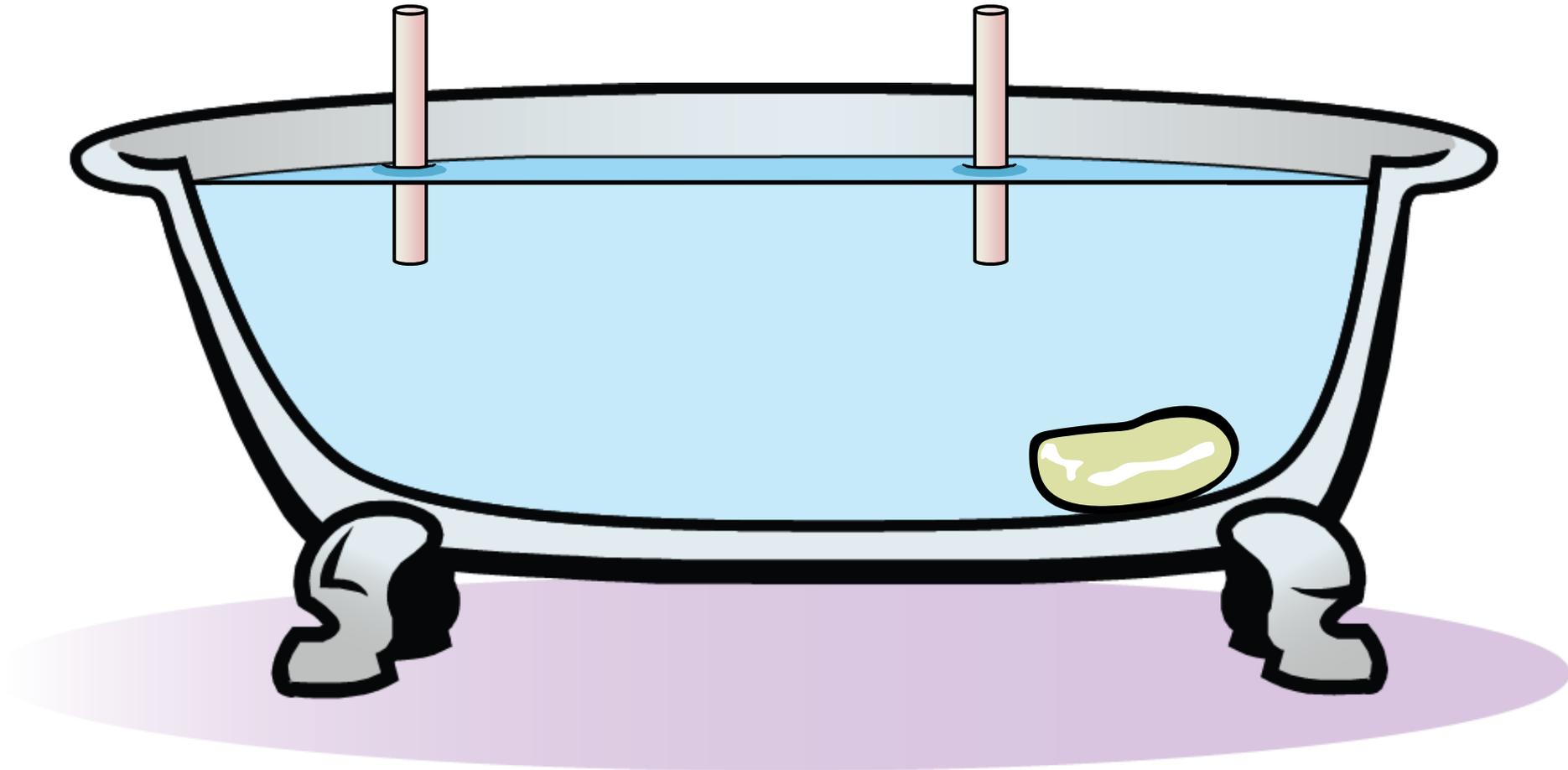


# LNAPL





# DNAPL in bedrock analogy







# FAQs

1. Why has the site been around for almost 30 years and is still not cleaned up?
2. Is it safe to eat vegetables or fruits grown in our gardens?
3. Is anyone drinking the water?
4. When will the site be cleaned up?

# Current/Upcoming Activities

- OU1:
  - Bedrock extraction pilot study
  - End-use report for ON Semiconductor's treated water
  - Soil gas sampling to evaluate the vapor intrusion to indoor air pathway in the residential neighborhood immediately west of the former Motorola 52nd Street facility



- OU2:
  - Facility specific Remedial Investigations
  - Honeywell has completed its Remedial Investigation and is working on a Feasibility Study
  - Honeywell's Bio-enhanced Soil Vapor Extraction (BSVE) system is up and running
  - Consent Decree for Operation and Maintenance of the OU2 Groundwater Pump and Treat System has been filed with the court by ADEQ.

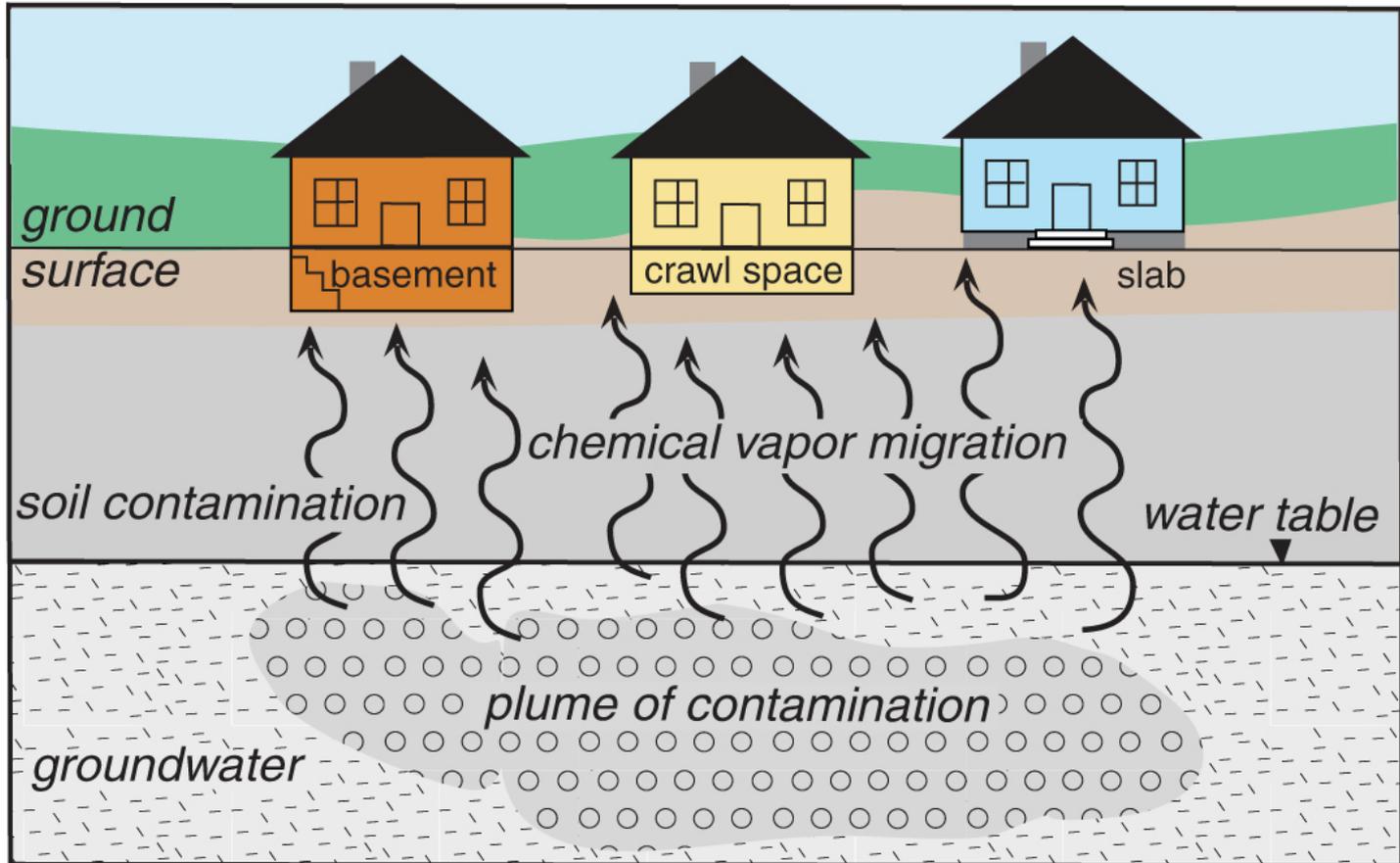
- OU3:
  - Administrative Order of Consent between EPA and Responsible Parties has been signed.
    - Honeywell and Arizona Public Service will work together on a Remedial Investigation/Feasibility Study
  - EPA and ADEQ are in final stages of commenting on the work plan for the Remedial Investigation and Feasibility Study.
  - Field work scheduled to begin this fall

# 5 year review

- Due next year
- Community interviews will be conducted to incorporate into both the 5-year review and a Community Involvement Plan update. Please contact me if you are interested.



# Vapor Intrusion Pathway



# Map of Vapor Intrusion Study Area



# Next Steps

- EPA and Freescale sign Administrative Order on Consent (AOC) and a Statement of Work (SOW) for Soil Gas and Vapor Intrusion to Indoor Air Pathway Evaluation
- Freescale submits Draft Soil Gas Sampling Work Plan 30 days after the effective date of the AOC
- Community members will be able to review and comment on the Draft Work Plan which will include proposed soil gas sampling locations

# Next Steps, continued

- Conduct CIG meetings, neighborhood association meetings and/or informal meetings to make sure everyone is comfortable with the sampling locations and process for collecting the samples.
- Two rounds of soil gas sampling will be conducted. Samples will be collected in the public right- of- way, beneath pavement and as close as possible to homes/schools.
- Soil gas sample results will be compared to health-based screening levels to determine if indoor air sampling is needed.



## **OU3 Administrative Order on Consent (AOC) and Statement of Work (SOW) for Remedial Investigation and Feasibility Study (RI/FS)**

- The RI/FS AOC was signed in September 2009 with Honeywell and Arizona Public Service
- The Work Plan to implement the SOW is nearing approval by EPA and ADEQ
- Fall 2010 - install groundwater monitoring wells and soil vapor monitoring wells

# OU3 Remedial Investigation/Feasibility Study - continued

- 90 days after Notification of Completion of Field Work:
  - Draft RI Report and Draft Groundwater Baseline Risk Assessment
- 45 days after approval of RI
  - Draft OU3 Feasibility Study Work Plan