



Motorola 52nd Street Superfund Site Community Information Group Webinar April 20, 2016 - 6:00p to 8:00p

Welcome & Opening - Carlin Hafiz, EPA & Sue Kramer, CB&I

- Logistics for webinar, ground rules, roll call of CIG members only

Review Agenda - Carlin Hafiz, EPA

Five Year Review - Rachel Loftin, EPA

OU1 Updates - Laura Fischer, ADEQ / Rachel Loftin, EPA / Tom Suriano, Clear Creek

OU2 Updates - Brian Stonebrink, ADEQ / Rachel Loftin, EPA / Sue Kraemer, CBI

OU3 Updates – Rachel Loftin, EPA

CIG Communications - Carlin Hafiz, EPA / Rachel Loftin, EPA

- Various forms of communication are being used to update the CIG
- Webinars

Technical Assistance Services Contract (TASC) Update - Viola Cooper, EPA

Schedule Next Meeting & Adjourn



Motorola 52nd Street Superfund Site

Community Information Group

Ground Rules

- Treat each other with respect
- Value constructive feedback
- Be brief and focus on facts, rather than opinions
- Be open, non-judgmental in our communications
- De-personalize the discussion-no personal attacks
- Honor that everyone participates, no one dominates
- Create action list with responsibilities, timelines
- Items outside focus of meeting take place offline



- The 2016 FYR is underway. It evaluates the technical aspects of the OU1 and OU2 treatment plants to ensure they remain protective of human health and the environment.
- Interview forms are being sent out to individuals to complete and return.
- The FYR will be completed in September 2016 and available at the site repositories and ADEQ and EPA websites. We will email the report text to the CIG email list as well.



- ADEQ and EPA are reviewing the 2015 Operable Unit 1 Effectiveness Report reflecting the annual groundwater sampling in fall 2015.
- Field work is currently underway to identify and address remaining data gaps that may have existed in order to complete the Remedial Investigation. Work includes vadose zone investigations in two areas at the former 52nd Street facility campus, confirmation sampling for post-remediation rebound confirmation, and groundwater investigation to address identified data gaps. Upon completion of the Remedial Investigation, a Feasibility Study will be conducted to determine if any changes or adjustments to the existing remedy are necessary.
- During 2015, the OU1 extraction wells produced and treated an approximate total of 96,470,008 gallons of groundwater with an estimated 584 pounds of volatile organic compounds recovered and disposed of, including 2.8 pounds extracted from bedrock as free-phase dense non-aqueous phase liquids.
- From startup through 2015, approximately 3.74 billion gallons of water have been extracted and treated with an estimated 24,852 pounds of volatile organic compounds being recovered.



Vapor Intrusion

- The residential vapor intrusion investigation is complete. A total of 16 residential buildings required mitigation. One vacant commercial property requires a deed restriction and mitigation when it becomes ready to be occupied. Ongoing maintenance checks and monitoring are conducted at mitigated homes.
- The former M52 Plant vapor intrusion investigation is in progress by Freescale/Clear Creek, approximately 90 acres. Presentation from Clear Creek on activities.



- ADEQ and EPA are reviewing the 2015 Operable Unit 2 Effectiveness Report reflecting the annual groundwater sampling in fall 2015.
- ADEQ and EPA have submitted comments on the Draft Focused Feasibility Study for the Honeywell 34th Street Facility.
- The agencies have also submitted comments on the Honeywell Area 21 located near 20th Street and Washington and have requested soil gas sampling to be conducted as part of the Focused Remedial Investigation.
- The OU2 Groundwater Treatment system continues to provide plume containment and since start up in 2001 over 15,000 pounds of volatile organic compounds (VOCs) have been removed from the groundwater. Since 2001 groundwater levels have declined by an average of approximately 16 feet. The screen intervals above the water table, especially the southern extraction well are being monitored. So far this hasn't affected the extraction rates.
- ADEQ has completed the September 2014 Sitewide maps and are in the process of completing the September 2015 Sitewide maps.



- The former Joray/Kachina facility located at 30th Street and Washington continues to operate the soil vapor extraction (SVE) system that started in March 2013. Contaminant levels for PCE in the shallow zone beneath the facility have been significantly reduced. Pre SVE levels were as high as 39,000 ug/m³ and currently only 1 location/depth exceeds the industrial soil gas human health screening levels. Planning for the step out delineation of soil gas is underway along with an investigation of DNAPL at the southern drywell in the 55 foot depth zone above bedrock.
- ADEQ with Hargis and Associates performed a remedial investigation at the Nelson Engineering Facility located at 4020 East Airline. The Remedial Investigation report was completed in late May 2015 and follow up confirmation samples for chromium and arsenic have been requested.
- Former Honeywell Area 13 located at 27th Ave and Washington submitted the Final RI report which was accepted and closed out. No exceedances of VOCs in soil gas were reported.
- The site-wide OU2 RI will be completed after the September 2016 groundwater sampling round and vapor intrusion sampling.



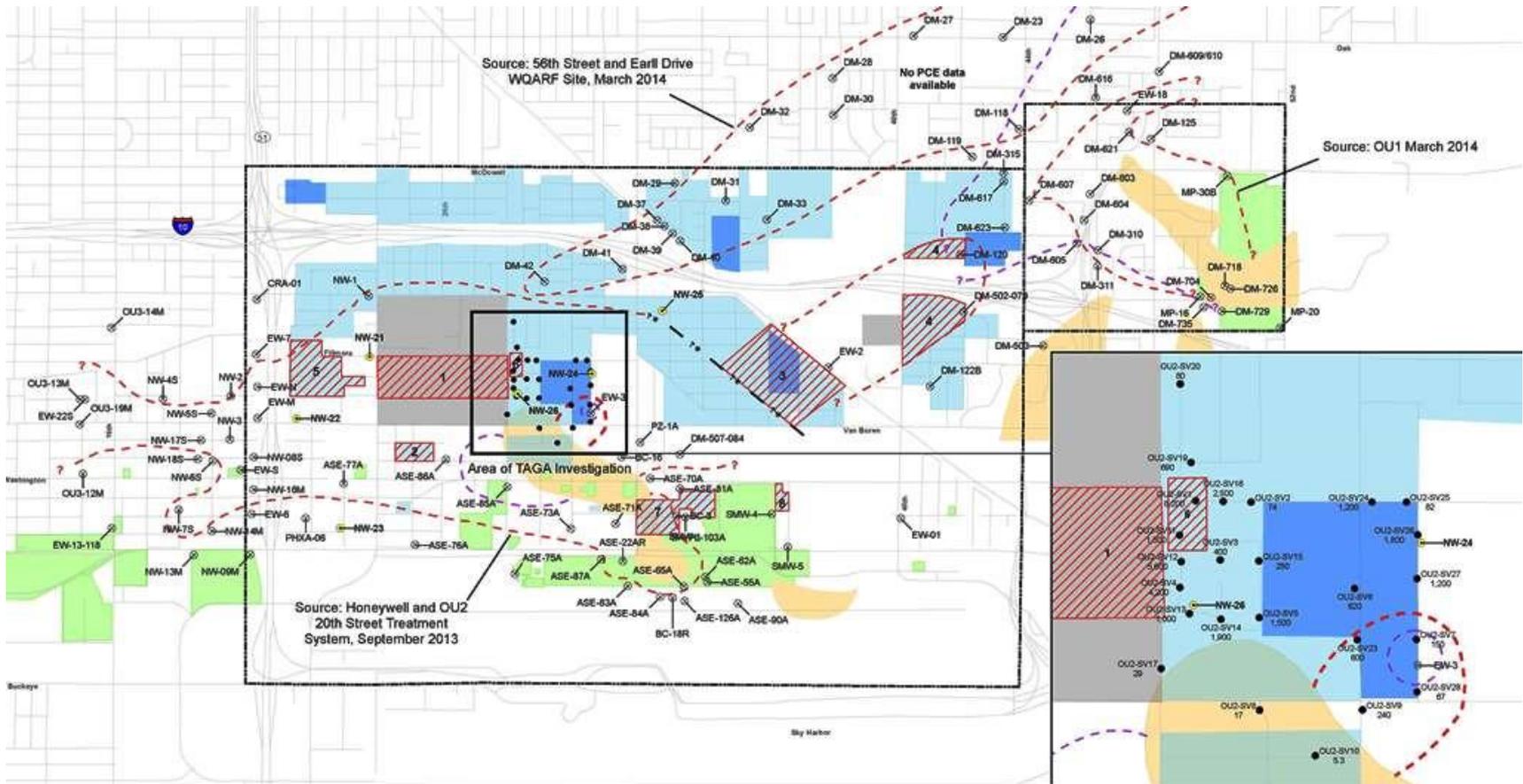
Vapor Intrusion

- OU2-wide vapor intrusion work is being planned. The work will be implemented by Freescale and Honeywell. Presentation from CB&I on planned activities.

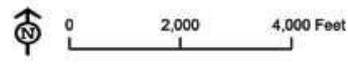
- OU2 Vapor Intrusion Background
 - EPA conducted limited Vapor Intrusion (VI) sampling in February 2014
 - OU2 results warranted additional data collection
 - EPA's goal is to determine if VI is occurring in OU2

- Upcoming OU2 Vapor Intrusion Investigation
 - Freescale and Honeywell will conduct the work under an Administrative Order on Consent (AOC) with EPA

- Mapped Sensitive Receptors (residential, schools, hospital, etc.)
- Ran model to estimate groundwater concentrations that could result in vapor intrusion
- Data review
 - Current and historical groundwater data
 - Soil gas results
 - Groundwater flow
 - Bedrock geometry



- | | | |
|--|--|---|
| <ul style="list-style-type: none"> ○ ASE-77A Well Location and ID ○ NW-21 New Well Location and ID ● Soil Gas Location and ID ○ TCE Concentration $\mu\text{g}/\text{m}^3$ ○ PCE Concentration $\mu\text{g}/\text{m}^3$ | <ul style="list-style-type: none"> --- Extent of Salt River Gravel Hydrostratigraphic Unit - - - 5 $\mu\text{g}/\text{L}$ TCE Groundwater Contour - - - 100 $\mu\text{g}/\text{L}$ TCE Groundwater Contour - - - 5 $\mu\text{g}/\text{L}$ PCE Groundwater Contour ----- Operable Unit Boundary | <ul style="list-style-type: none"> Area of Interest and Number Bedrock Rise Residential School Hospital Potentially Responsible Party |
|--|--|---|

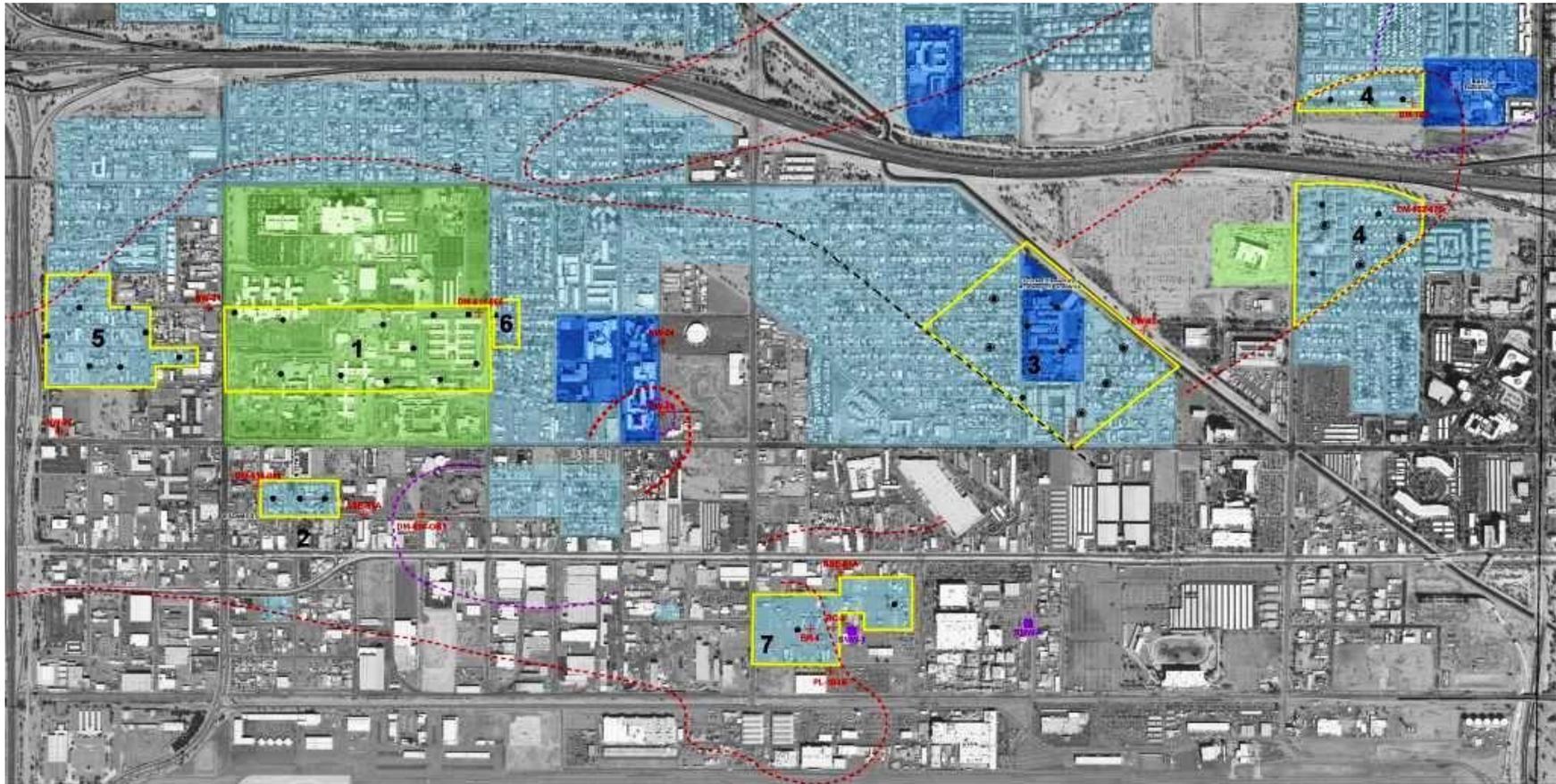


Note: Well locations shown are a subset of the total number of wells in OU1, OU2, and OU3 used for drawing the TCE contour.
 TCE = trichloroethylene
 PCE = tetrachloroethylene



Motorola 52nd Street Superfund Site
 Phoenix, Arizona

Figure 1
 OU2 Summary Map of Receptors, Groundwater Plumes, Soil Gas Data, and Areas of Interest for Vapor Intrusion

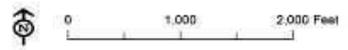


- Primary Soil Gas Sample Location
- Secondary Soil Gas Sample Location
- ▲ Proposed Indoor Air Sample
- ⊕ Proposed Monitoring Well Location
- EW-41 Monitoring Well Location and ID
- SGW-1 Soil Gas Monitoring Well Location and ID

- 2 Area of Interest and Number
- Residential
- School
- Hospital

- Extent of Salt River Gravel Hydrostratigraphic Unit
- - - 5 µg/L TCE Groundwater Contour
- - - 100 µg/L TCE Groundwater Contour
- - - 5 µg/L PCE Groundwater Contour
- Operable Unit Boundary

TCE = trichloroethylene
PCE = tetrachloroethylene



Motorola S2nd Street Superfund Site
Phoenix, Arizona

Figure 2
OU2 Vapor Intrusions Areas
With Sample Points

- Freescale and Honeywell will conduct the following:
 - Obtain access to sampling locations, city permits, etc.
 - Install a groundwater well that meets OU2 data needs although installed for another project
 - Conduct soil gas field work by end of 2016 or early 2017
 - Report soil gas results to EPA, as received, to assess if additional work needed or not
 - Vapor intrusion results will be incorporated into OU2-wide Remedial Investigation Report



- The draft Remedial Investigation, Risk Assessment, and Feasibility Study reports for OU3 were submitted by the OU3 Working Group in late April 2015. Agency comments were provided on the RI which is planned for completion this year. The public comment period occurs after the Feasibility Study is completed and a preferred remedy is selected.
- EPA and ADEQ are reviewing the Annual Groundwater Monitoring Report reflecting the annual groundwater sampling in fall 2015.
- EPA continues to work with other facilities on site-specific evaluations.

Vapor Intrusion

- The OU3 soil vapor data indicates there is no vapor intrusion threat at OU3.
- 2014 soil vapor data indicates a small, localized area of elevated soil vapor levels in the vicinity of soil vapor monitoring well SVM-1. EPA is evaluating the possible source(s) of this small soil vapor plume and whether any further steps are warranted. The soil vapor plume is located in a paved parking lot area.



Next Conference Call or Webinar

- Proposed date is October 26
- Conference call with Agencies if up to 5
CIG members confirm attendance
- Webinar if 6 or more CIG members
confirm attendance