



Department of
Toxic Substances
Control



CalEPA
California Environmental
Protection Agency

Community Update Meeting Miraflores Housing Development, Richmond, CA

MARCH 5, 2025, 6:30 PM

KING ELEMENTARY SCHOOL



Agenda

1. Key Points
2. Introductions
3. Site History
4. Updates
5. Discussion



Miraflores Housing Development Site

! Today's Key Points

20 years of studies.

PCE chemical is underground.

PCE can be indoor air problem.

PCE source is unknown.

No known immediate health risk.

More studies needed.

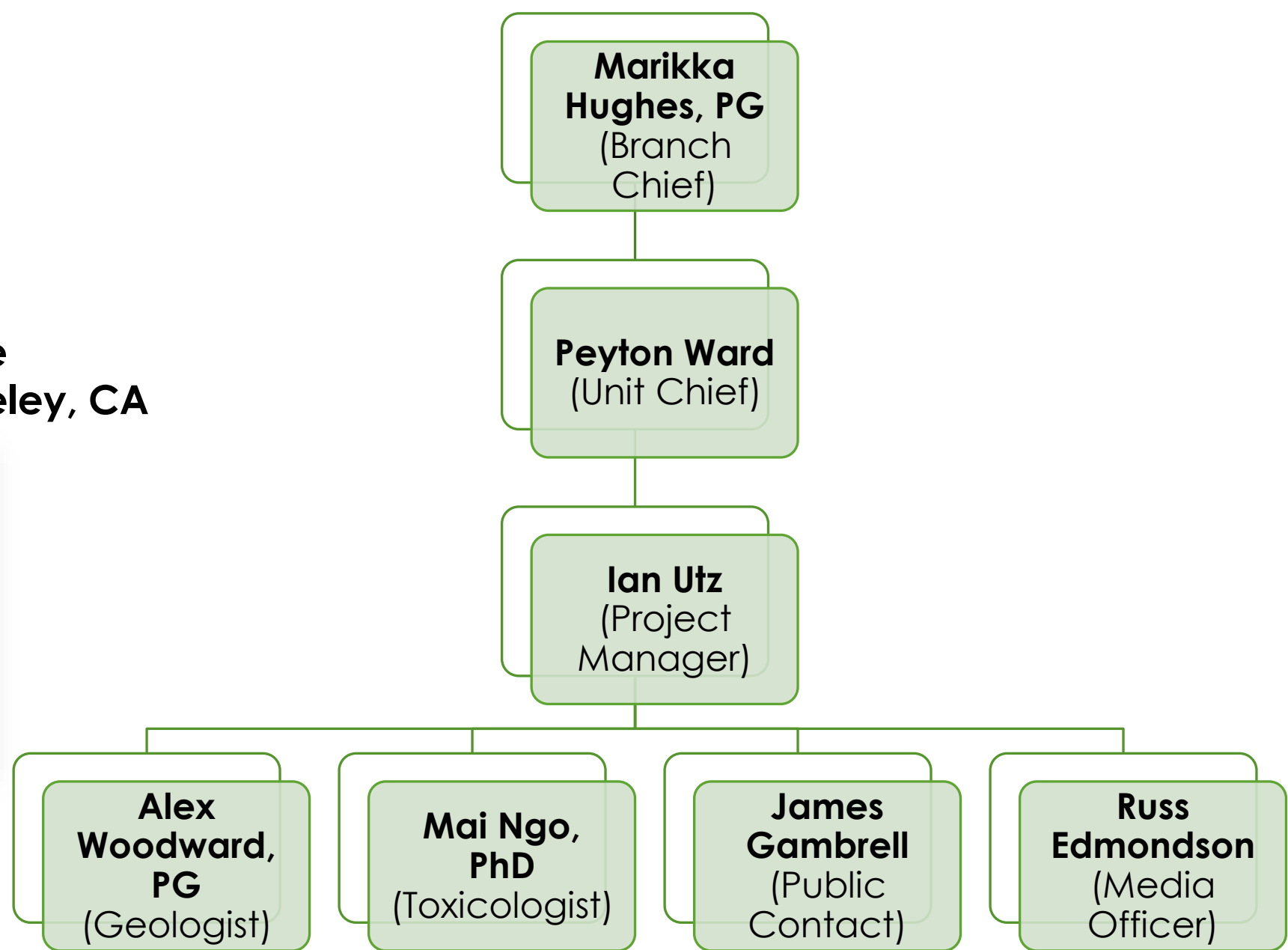


Introductions



DTSC Team

Berkeley Regional Office
700 Heinz Avenue, Berkeley, CA



Work Teams



Lina Velasco
(City of Richmond)

Linda Mandolini
(Miraflores Senior, L.P.)

Scott Taylor
(ACRIRE Holdings, LLC)

Carol Fortman
(Target Corp)

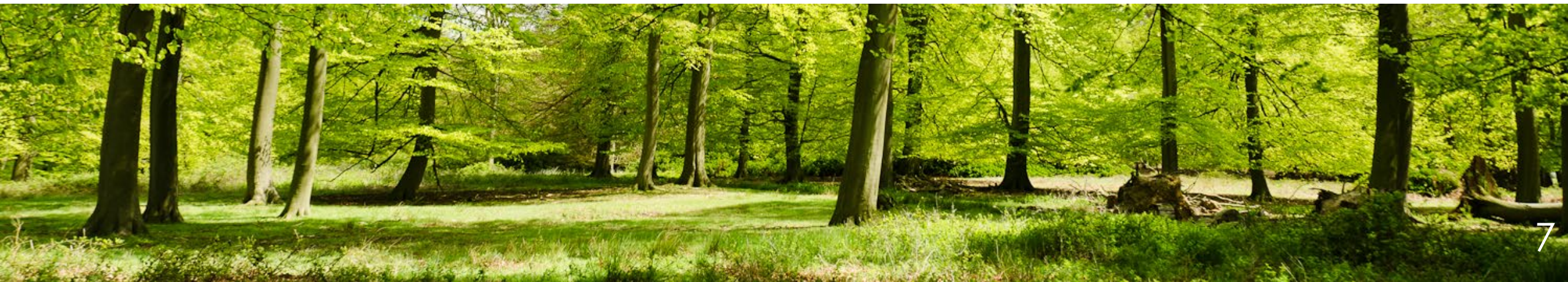
Eric Ehlers, PG
(AKT Peerless Environmental Services)

Trevor Atkinson, PE
(NV5)

Robert Plybon, PE
(EKI Water & Environment)

Angus McGrath, PhD
(Stantec Consulting)

Site History



Former
Montgomery
Ward (Target
Store)

North and East

Former Omo's
Fabricare Dry
Cleaner

Richmond Heights

El Cerrito

Park Plaza
Neighborhood

Miraflores Housing
Development



Miraflores Site History

**Plant Nurseries
(1900s-2000s)**



**Soil Cleanup
(2010s)**



**More Investigation
(2020s-Now)**



Tetrachloroethylene (“PCE” or “PERC”)

- Cleaning agent.
- Commonly used in historical dry cleaning & other industries.
- Hazardous substance that travels far and evaporates.



Example of PCE.



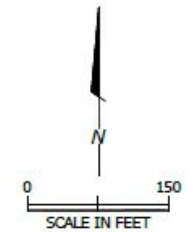
Example of monitoring well to sample groundwater.

Maximum PCE in Shallow Groundwater (2001-2020)

Approximate
Flow Direction

Shallow PCE
(<25 feet bgs)

- $\geq 1 \mu\text{g/L}$
- $\geq 10 \mu\text{g/L}$
- $\geq 100 \mu\text{g/L}$



Note: The original version of this figure includes color-designated features. A black and white copy of the figure may not accurately represent the information originally presented.

Aerial Photo: June 28, 2022 (Google 2024)
Basemap: Overall Site Plan, prepared by Carlson, Barbee & Gibson, Inc. Dated March 30, 2016

NV5

Subject Property Plan and
Soil Vapor Sample Locations
Soil Vapor Investigation
Miraflores Housing Development
Richmond, California

FIGURE
2

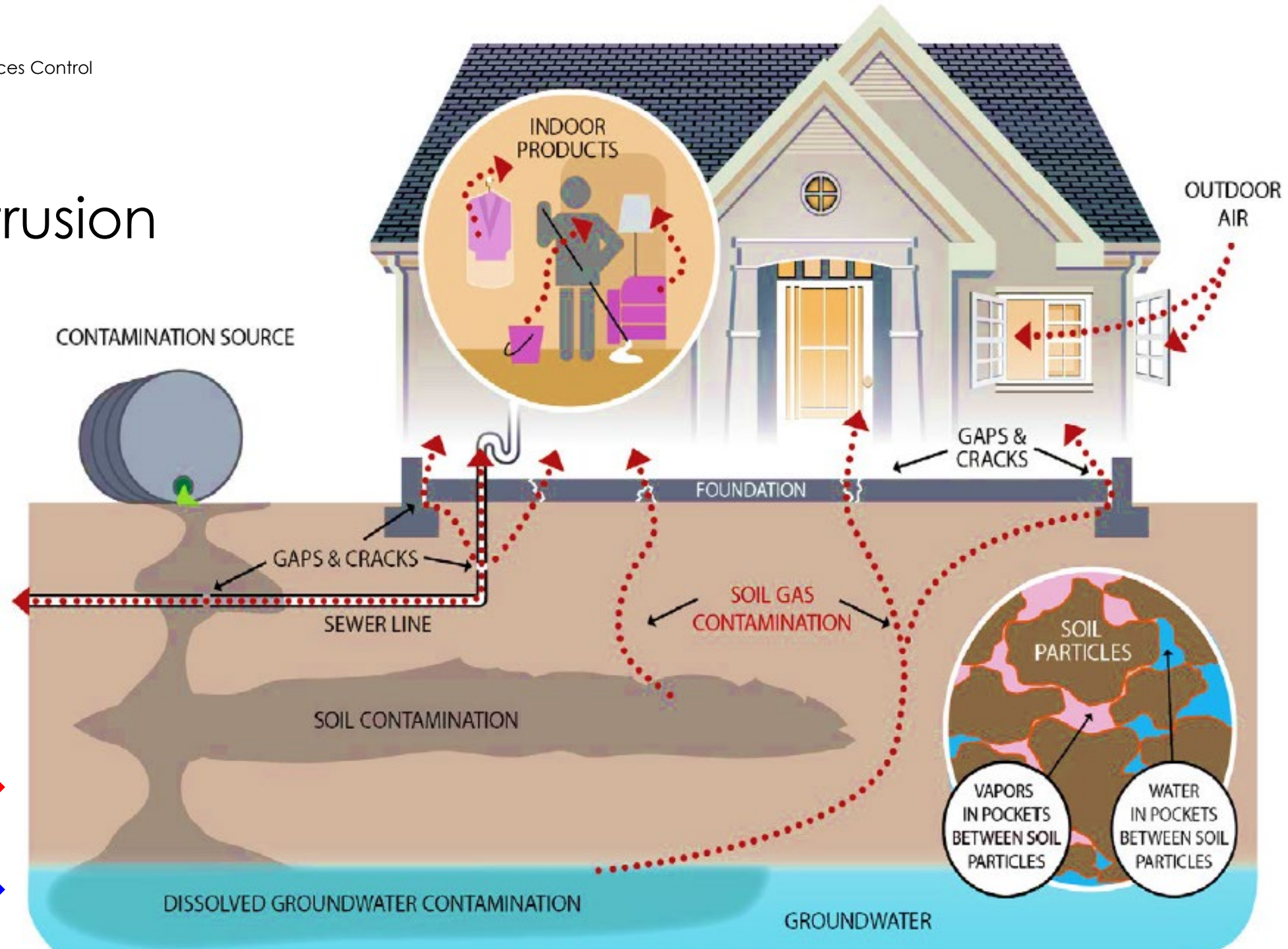
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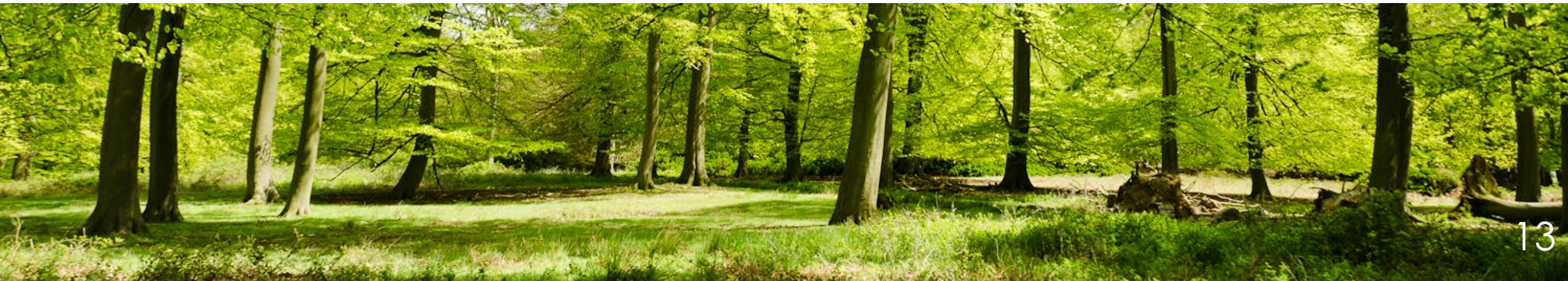
Vapor Intrusion



Soil gas →

Groundwater →

Updates

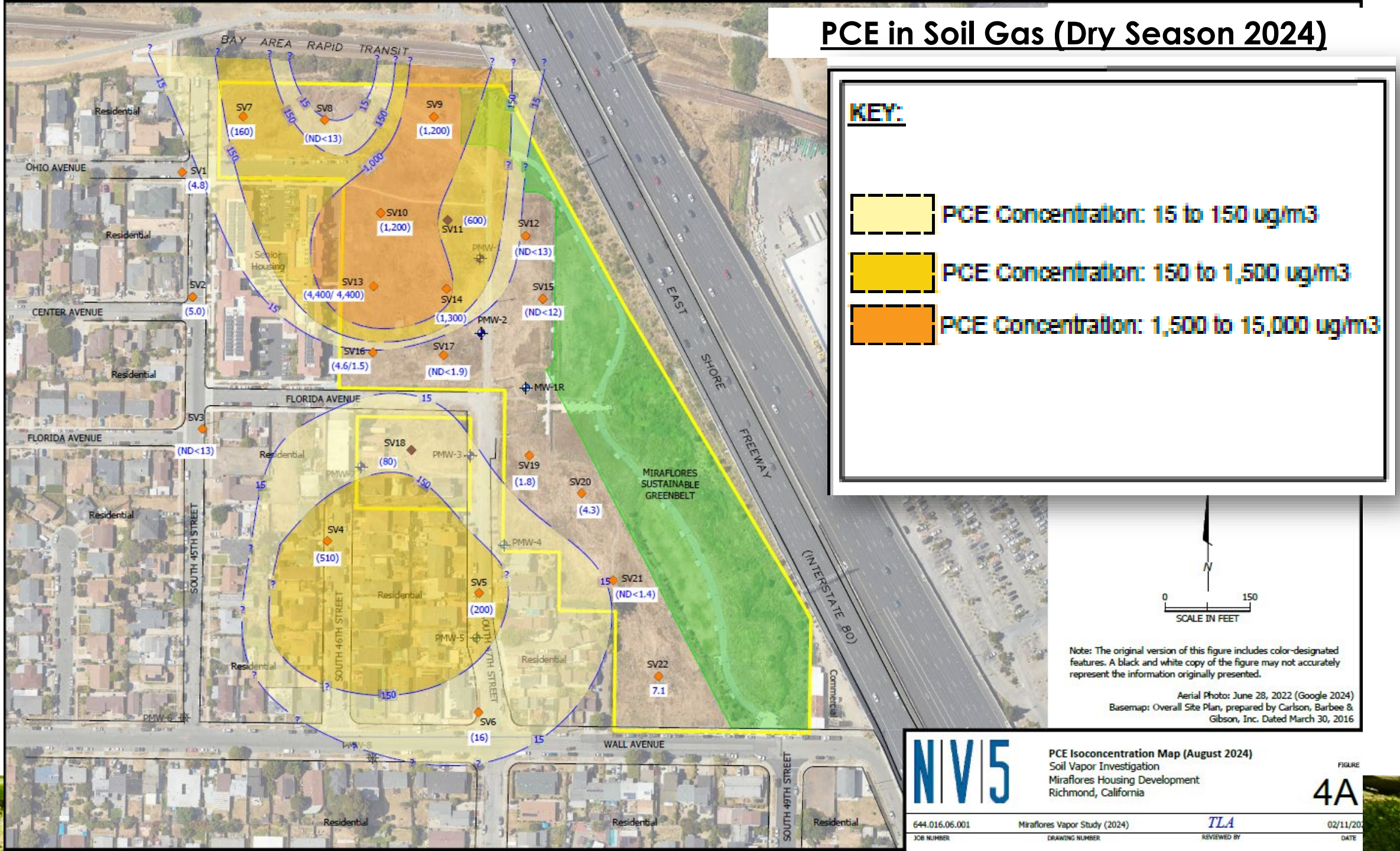


Miraflores Housing Development

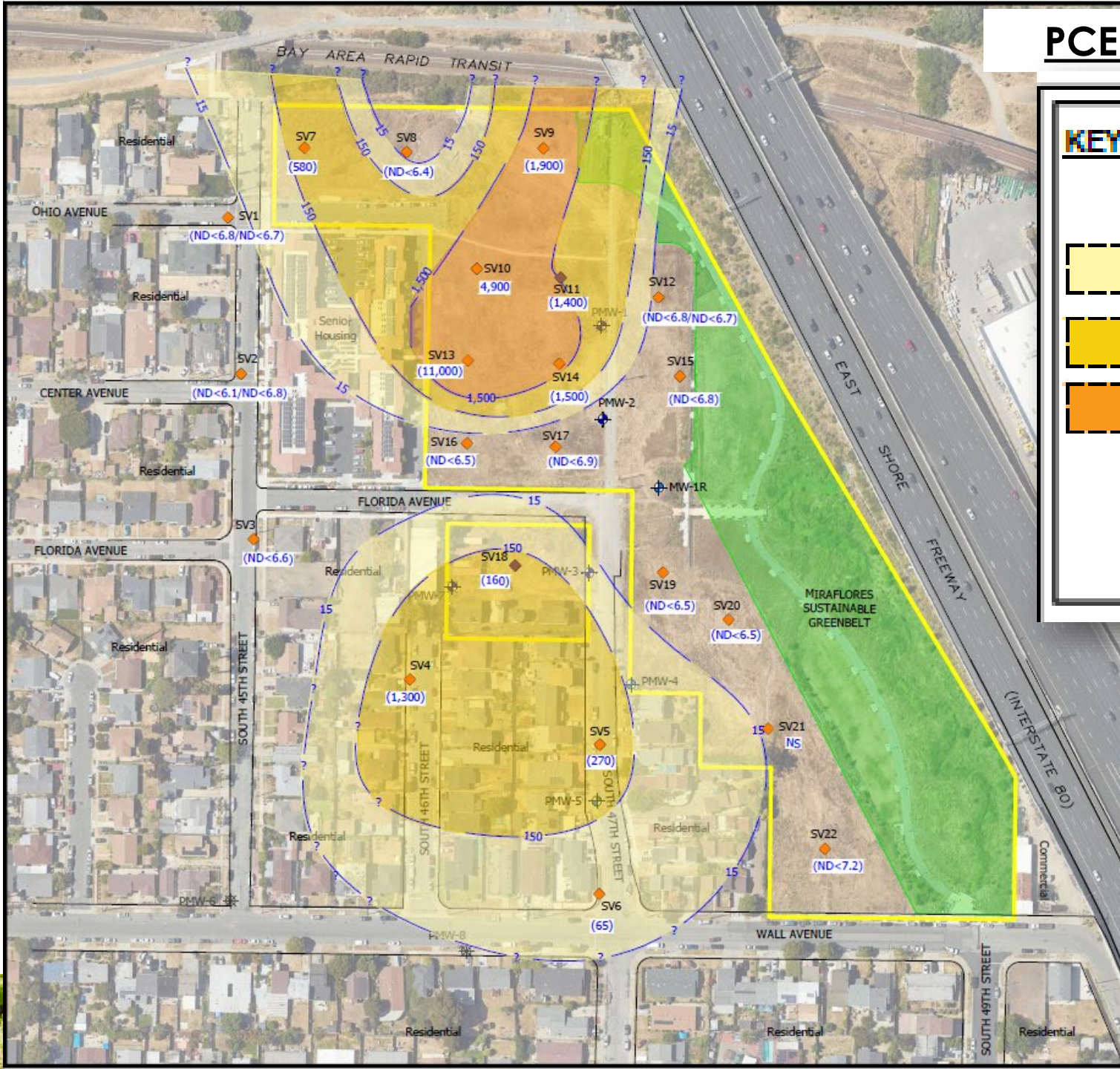


Map of the Miraflores Housing Development Site - 

PCE in Soil Gas (Dry Season 2024)

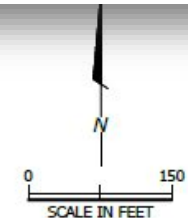


PCE in Soil Gas (Wet Season 2024)



KEY:

- PCE Concentration: 15 to 150 ug/m3
- PCE Concentration: 150 to 1,500 ug/m3
- PCE Concentration: 1,500 to 15,000 ug/m3



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PCE Isoconcentration Map (December 2024)
Soil Vapor Investigation
Miraflores Housing Development
Richmond, California

FIGURE

4B

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Miraflores Vapor Study (2024)

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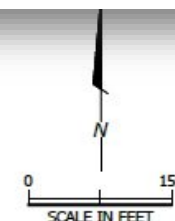
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KEY:

-  PCE Concentration: 15 to 150 ug/m³
-  PCE Concentration: 150 to 1,500 ug/m³
-  PCE Concentration: 1,500 to 15,000 ug/m³

Upcoming
testing
in 2025.

More
information
needed.



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PCE Isoconcentration Map (December 2024)
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FIGURE

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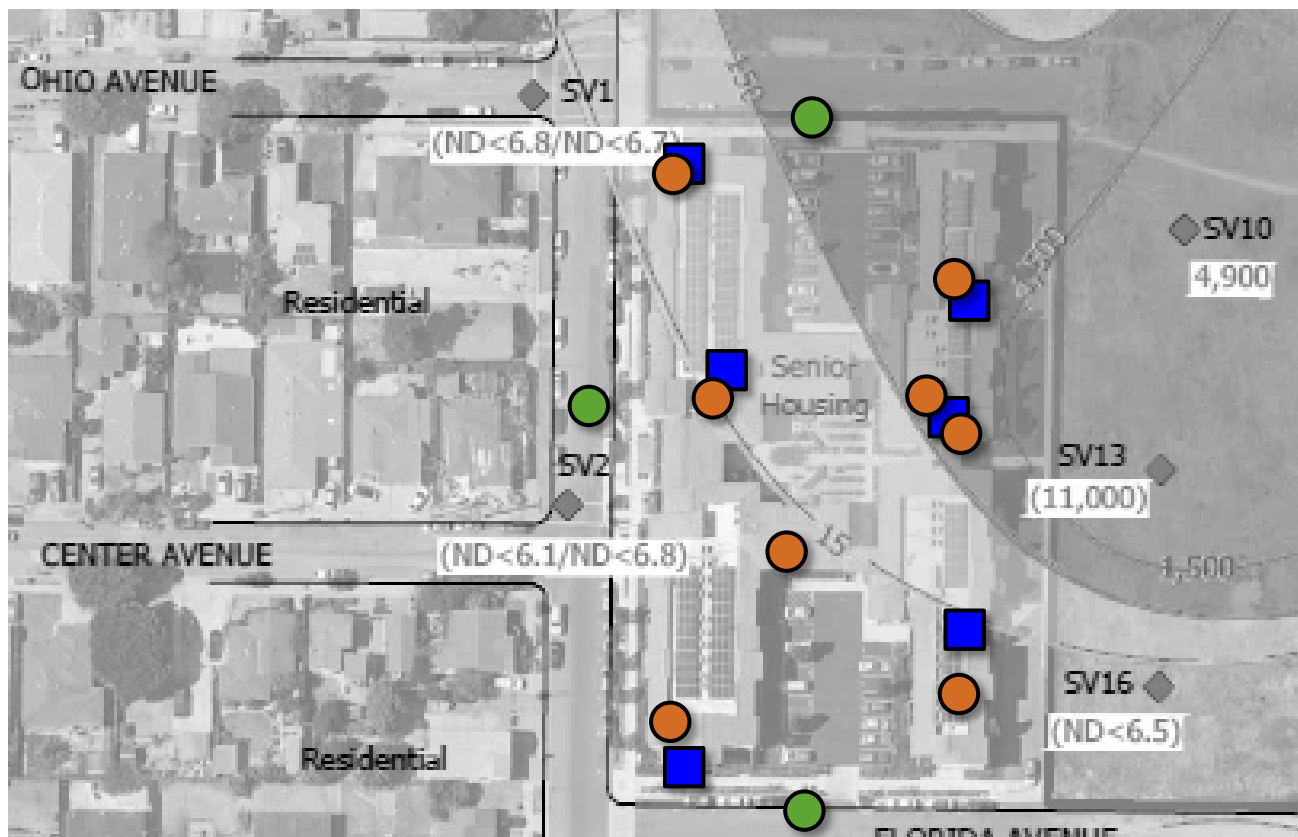
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Upcoming Testing at Miraflores Senior Apartments (Wet Season + Dry Season 2025)



Upcoming Testing at Miraflores Senior Apartments (Wet Season + Dry Season 2025)



- Sub-Slab Vapor Sampling Location
- Indoor Air Sampling Location
- Outdoor Air Sampling Location

Example sampling equipment



Target Store/Formal Montgomery Ward



Map of the Miraflores Housing Development Site - 

1959-1960



2024



Former Omo's Fabricare Dry Cleaners



Map of the Miraflores Housing Development Site - 

2011



2025



! Today's Key
Points

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Discussion



Thank you!

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www.envirostor.dtsc.ca.gov

Search “70000104” or “Miraflores Housing Development”

