

Delhi Groundwater Community Outreach Meeting

Wednesday, March 29, 2023, 6:00 p.m.

Delhi Center – 505 E Central Avenue



Ground Rules

- Start and end on time
- Silence mobile phone
- Participate fully and share your insights
- Listen to what others have to share
- Do not interrupt the speaker
- Moderator will redirect the conversation to keep focused on the meeting agenda



Agenda

1. Welcome, Introductions, and Ground Rules
2. Moderation By Amanda M. Bettinelli, Assistant U.S. Attorney
3. **City of Santa Ana Neighborhood Initiatives and Environmental Services** – Reporting Environmental Concerns
4. **City of Santa Ana Public Works Agency Water Resources Division** – Clean and Safe Drinking Water
5. **Orange County Water District** – Groundwater Quality Protection Project Update
6. **Department of Toxic Substances Control** – Status Update on Industrial Sites within South Region Basin
7. Questions & Answers

Reporting Environmental Concerns



You can report Environmental Concerns to these agencies to help improve the environment and your community's health.

REPORTING ENVIRONMENTAL PROBLEMS



There are many laws in place to protect our environment and our health. Local, State, and Federal Agencies are responsible for making sure that those laws are followed and that public health and the environment are protected from pollution. These agencies rely on the residents that live in the community to be the eyes and ears of any environmental concerns. You can report problems to these agencies to help improve the environment and your community's health.

REPORTING ENVIRONMENT AND FOOD SAFETY COMPLAINTS

Contact OC Health Care Agency - Environmental Health
Call (714) 433-6000. For a lead blood test for your child call (714) 567-6220.

General food safety, hazardous waste (illegal dumping, storage, solid waste), lead exposure, public swimming pools, body art/permanent makeup, etc.

REPORTING AIR QUALITY COMPLAINTS

Contact South Coast AQMD
Call (800) 288-7664 or visit www.AQMD.gov/Complaints

Have the date, time, type of air quality event (odors, dust, asbestos, smoke), odor description, and address or location of suspected source.

DISCHARGE OF POLLUTANTS INTO STORM DRAIN

National Pollutant Discharge Elimination System (NPDES)
Public Works Agency Dispatch call (714) 647-3380 or report an issue www.santa-ana.org/report-issue

Prohibited discharge, spill, illegal dumping, sediment (dirt) tracking, water pollution, storm drain, and flooding.

REPORT CODE ENFORCEMENT COMPLAINTS

Code Enforcement Division
Call (714) 667-2780 or go to www.santa-ana.org/submit-a-complaint-online/

Health and safety, land use, zoning violations and substandard conditions on commercial, industrial, and residential properties.

ENVIRONMENTAL LAWS VIOLATION

US EPA Region 9
<https://echo.epa.gov/report-environmental-violations>

To report possible violation of federal environmental laws and regulations.

FIRE HAZARD COMPLAINT

Orange County Fire Authority
Call (714) 573-6000 or email Referral@ocfa.org

Open burning, fire pit or barbecue, combustible waste storage, obstructed exits, overcrowding, fire hydrant or lanes, hoarding, etc.

FOR ADDITIONAL QUESTIONS OR CONCERNS CONTACT THE CITY OF SANTA ANA'S NEIGHBORHOOD INITIATIVES AND ENVIRONMENTAL SERVICES OFFICE AT (714) 667-2260 OR VISIT WWW.SANTA-ANA.ORG/ENVIRONMENTAL-RESOURCES/

Environmental Resources



Reporting Environmental Problems Flyer

This page shares State, Federal, and local agencies and organizations' data, reports, and news on environmental topics influencing Santa Ana's environmental quality. Information will continue to be posted as it is made available.

Environmental News

- EPA Finds Methylene Chloride Poses an Unreasonable Risk to Human Health - www.epa.gov/assessing-and-managing-chemicals-under-tsca/final-risk-evaluation-methylene-chloride
- Attorney General Rob Bonta says companies face millions in liability for PFAS contamination - <https://www.siliconvalley.com/2022/11/10/california-files-major-lawsuit-to-clean-up-chemicals-it-calls-toxic-and-harmful-to-human-health-and-the-environment/>
- AQMD has issued a Notice of Intent to Issue Permit to Applicant: Dan Gurney's All American Racers, 2434 S. Broadway, Santa Ana to construct and operate one new paint spray booth. SCAQMD.PublicNoticeDanGurneysAllAmericanRacersInc
- UCI EcoGovLab Press Release: Preparing for Chemical Disasters - <https://faculty.sites.uci.edu/fortunlab/2022/10/04/torrance-toxic-tour/>
- Former DICEON Electronics Inc. Facility, 2215 S. Standard Avenue: DTSC.ApprovalofInterimRemedialActionPlanJune25_2021

Federal Resources



US Environmental Protection Agency

Visit our Environmental Resources page for additional information

www.santa-ana.org/environmental-resources/

Gathering Information to Report Environmental Problems

When it is Safe to Do So

Tips for Your Report

- Provide as much detail as possible, including the time and date of the problem, specific location, and any other details that could help an investigation.
- Give your name and contact information for follow up.
- If calling, ask for name and direct contact of person you are speaking to. Ask for details on follow up and if they can provide a complaint or record number. Note the date and time of the call.
- If using an online complaint form, note the complaint number and keep confirmation emails.
- If you are reporting again after not having the concern addressed, mention that to the representative and ask to speak to a supervisor.
- Ask to report in the language you are most comfortable using.
- Submit and keep copies of pictures taken to document the problem.

Source: <http://www.publichealth.lacounty.gov/eh/about/how-why-report-problems.htm>

Contact Information for Amanda M. Bettinelli



Assistant United States Attorney | Environmental Crimes and Community
Safety Section

Environmental Justice Coordinator

United States Attorney's Office | Central District of California

Telephone 213.894.0470 | Work Cell 213.393.5272

| amanda.bettinelli@usdoj.gov



SERVING OUR COMMUNITY:
Clean Water, Safe Water



CITY OF SANTA ANA

Public Works Agency Water Resources Division

WHAT WE DO FOR YOU



Deliver award-winning drinking water to your home or business



Respond to water and sewer emergencies



Continually monitor and protect our water sources and distribution system



Conducts extensive sampling and testing to ensure your water meets all water quality standards



Keep our community clean, safe and enjoyable

WATER SYSTEM

Groundwater wells

20



Reservoirs

10



7

Water connections to Metropolitan Water District



45,000

Water service connections



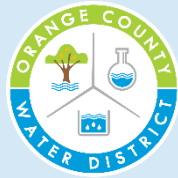
478

Miles of water mains



ABOUT CITY OF SANTA ANA'S PUBLIC WORKS AGENCY

TOTAL WATER SUPPLIES



74%
Groundwater



1%

Recycled Water

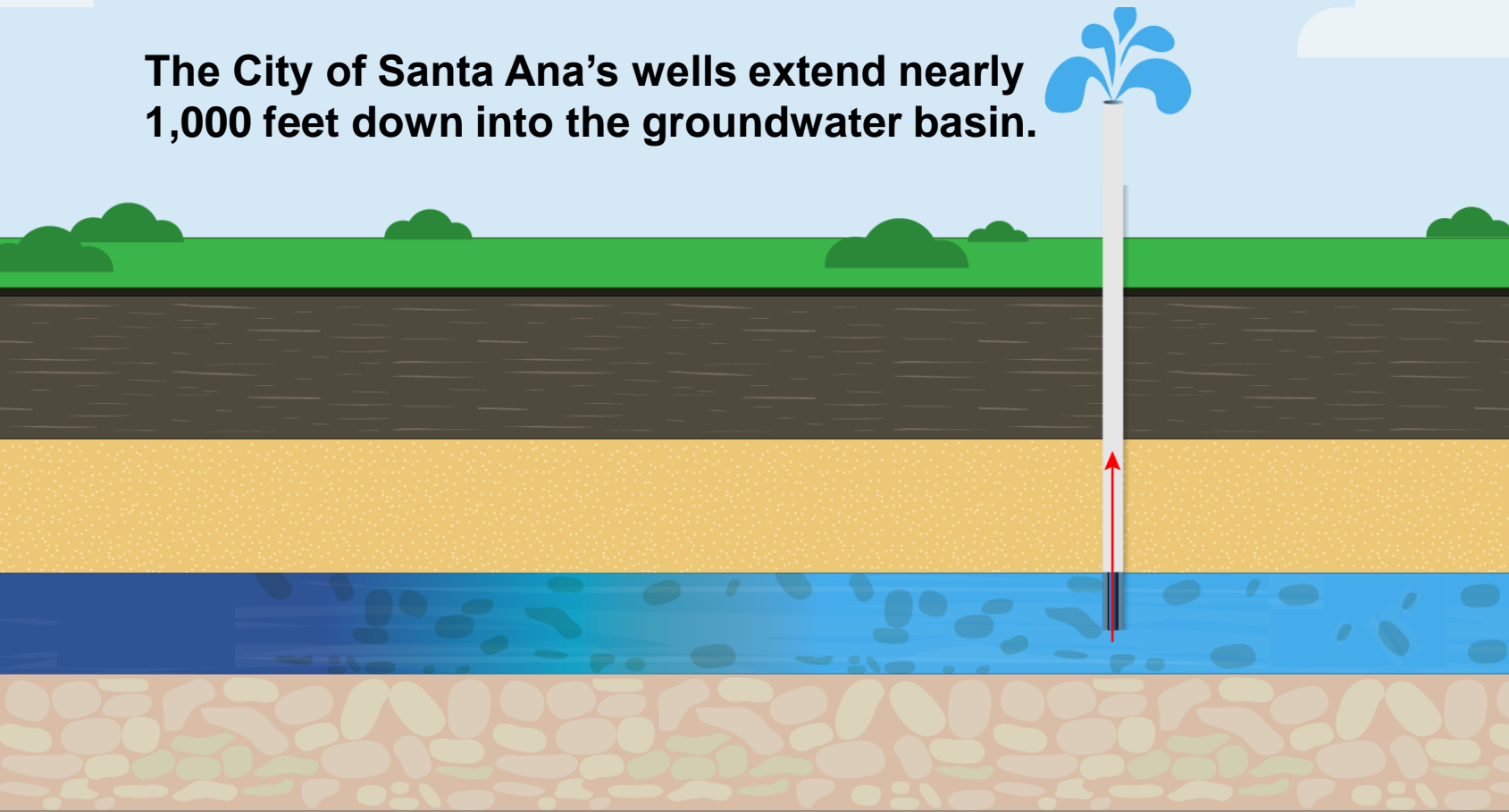


25%
Imported Water



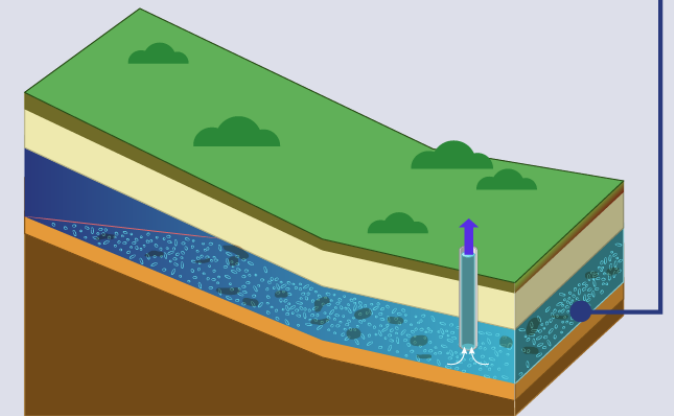
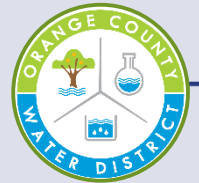
GROUNDWATER AQUIFER SYSTEM

The City of Santa Ana's wells extend nearly 1,000 feet down into the groundwater basin.



City's Main Source Of Groundwater Supply

Groundwater Basin
Managed by Orange
County Water District

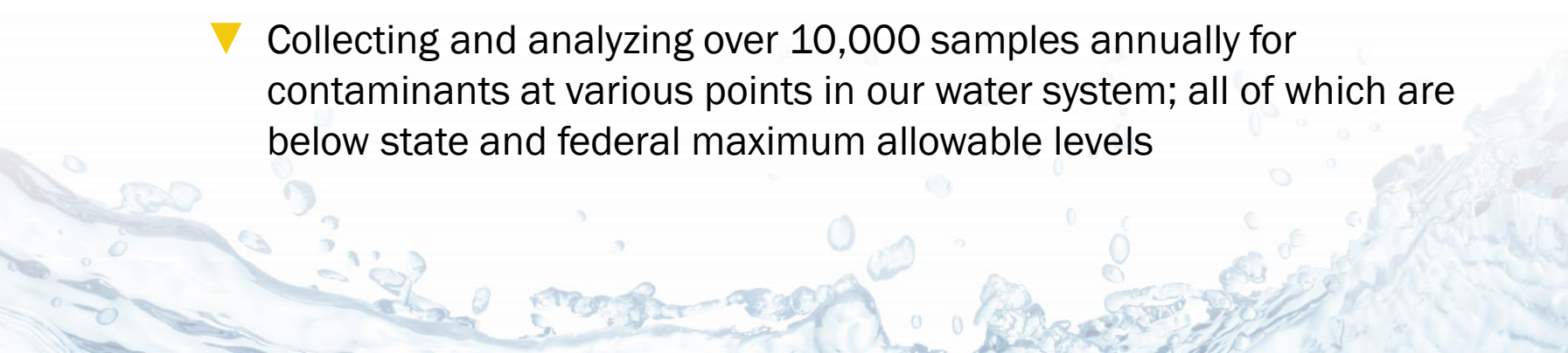




City of Santa Ana's Water Quality Department

Provides a safe and reliable water supply and ensures that the City is in compliance with all Federal and State laws & regulations.

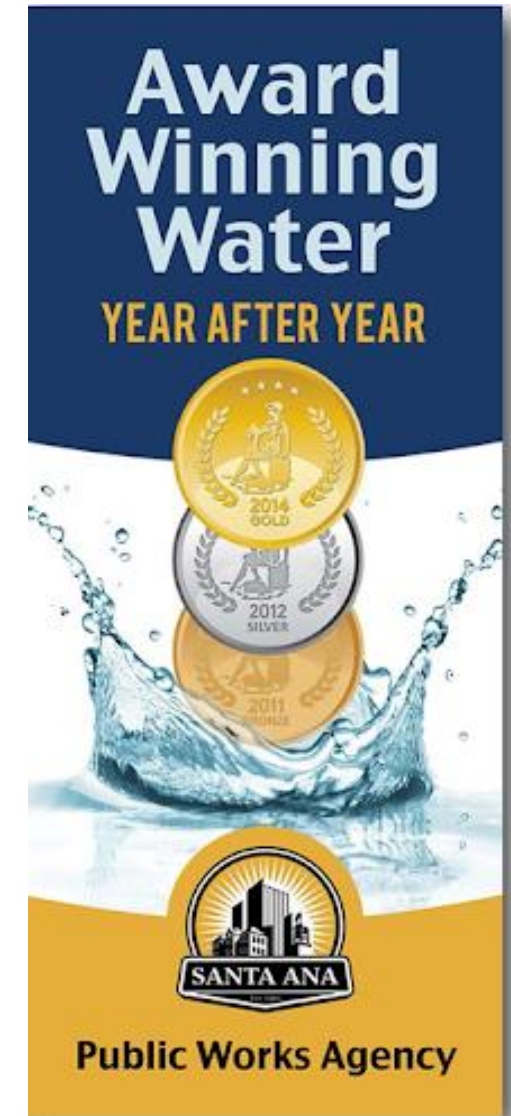
Maintains the highest standard of water quality by:

- ▼ Performing weekly, monthly, quarterly, and bi-annual basis sampling with a wide range of water quality parameters
 - ▼ Releasing annual Consumer Confidence Report (CCR) which details important information to help residents make health-based decisions about their drinking water
 - ▼ Educating the community about water quality
 - ▼ Collecting and analyzing over 10,000 samples annually for contaminants at various points in our water system; all of which are below state and federal maximum allowable levels
- 

SANTA ANA'S AWARD WINNING WATER

Year after year, the City has earned international recognition for our award winning tap water.

- ▼ Berkeley Springs International Water Tasting Contest since 2011
- ▼ Our City's water placed in the top 5 for the "Best Municipal Water in the USA" many times:
 - ▼ 2021 Silver Medal (MWD won Gold Medal)
 - ▼ 2018 Gold Medal
 - ▼ 2014 Gold Medal
 - ▼ 2012 Silver Medal
 - ▼ 2011 Bronze Medal





Thank you

www.santa-ana.org/pw

Contact Us:

Ph: (714) 647-3380

Hours

Monday through Thursday – 7:00 AM to 5:00 PM

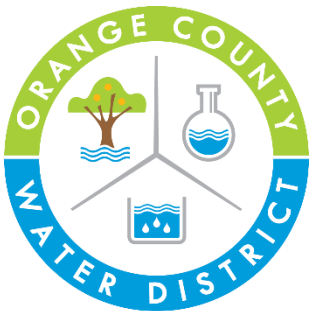
And alternate Fridays – 7:00 AM to 4:00 PM



Groundwater Quality Protection Project Update

Bill Leever, PG, CHg
Principal Hydrogeologist

March 29, 2023



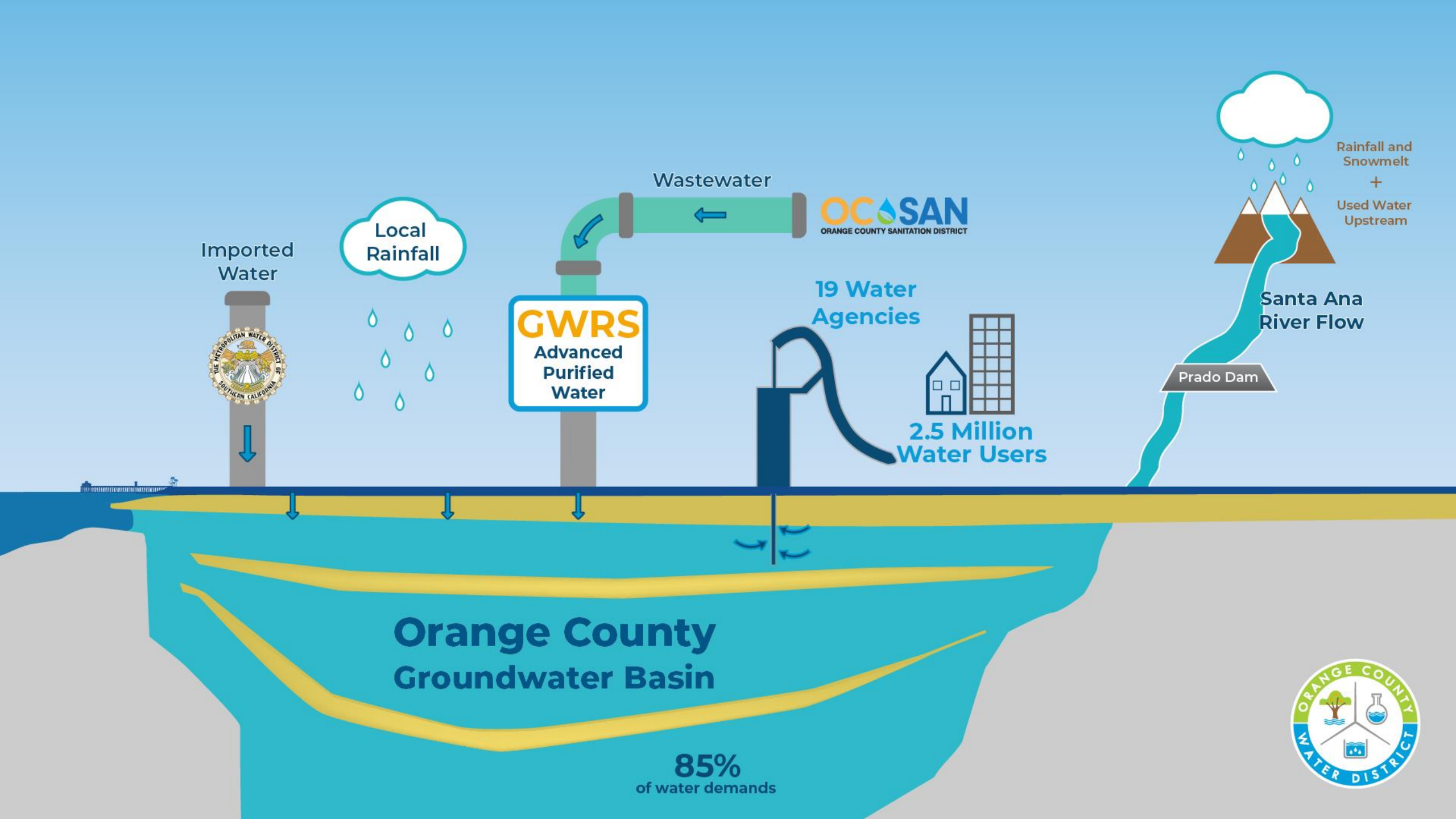
SINCE 1933

Orange County Water District

- Manages and replenishes the groundwater basin
- Ensures water reliability and quality
- Prevents seawater intrusion
- Protects Orange County's rights to Santa Ana River water



OCWD's mission is to provide a reliable, high-quality water supply in a cost-effective and environmentally responsible manner to the 19 cities and 2.5 million people it serves



Imported Water



Local Rainfall

Wastewater

OC SAN
ORANGE COUNTY SANITATION DISTRICT

GWRS
Advanced Purified Water

19 Water Agencies

2.5 Million Water Users



Rainfall and Snowmelt
+
Used Water Upstream

Santa Ana River Flow

Prado Dam

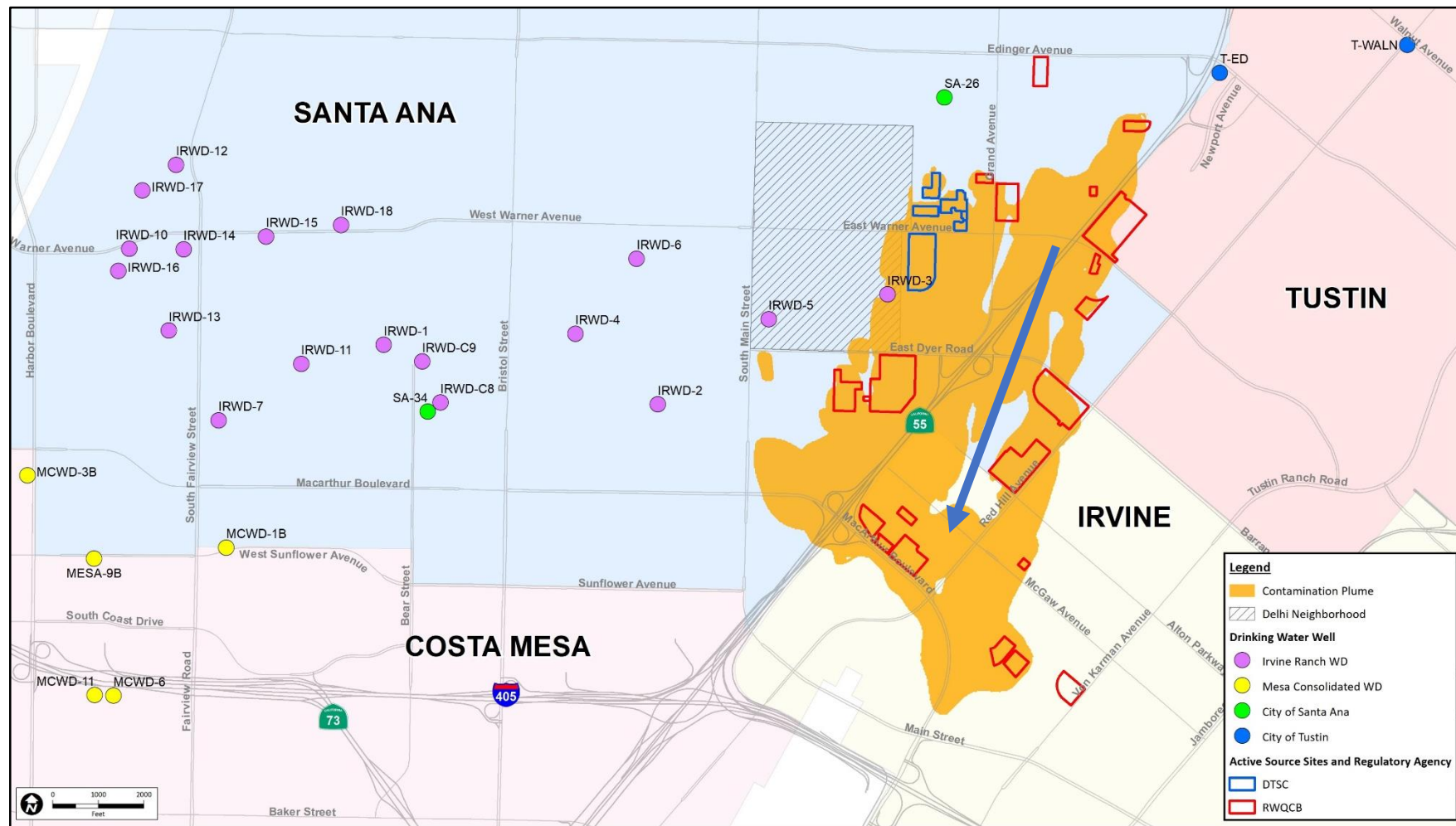
Orange County
Groundwater Basin

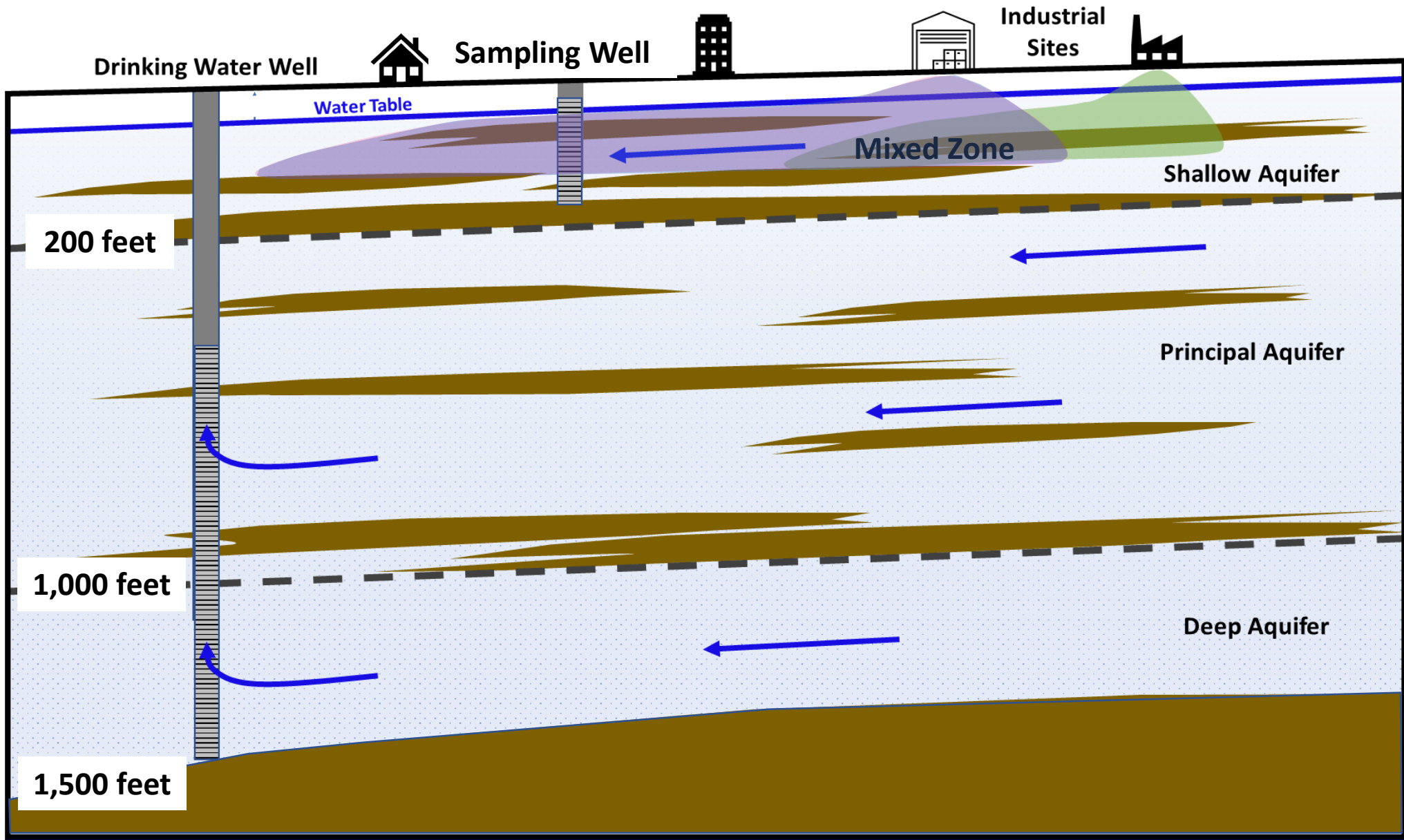
85%
of water demands



Shallow Aquifer Groundwater Contamination

- Industrial chemicals have impacted 2-mile² portion of the shallow groundwater
- Developing plans to clean up the pollution in a united effort with state and federal regulatory agencies
- We are monitoring all Santa Ana drinking water wells
- Only one water supply well has been removed from service.
- NO Santa Ana wells are impacted





Your Drinking Water is Safe

- Groundwater contamination is in shallow aquifer layers
- Santa Ana's drinking water comes from layers much deeper that are **not** contaminated
- OCWD samples and performs drinking water testing
- OCWD tests for more than 500 chemicals (far more than what is required by the state)
- OCWD analyzes more than 20,000 samples and reports more than 400,000 results each year
- Your water meets all state and federal drinking water standards



OCWD Taking Action

- Developing comprehensive plan to control and remove chemicals
- Will pump contaminated water out of the aquifer and remove the chemicals using extraction wells
- Testing to confirm where extraction wells should be located
- Design and construction expected to begin in 2024
- Clean up estimated to begin within 3 to 5 years



OCWD is committed to working with the community to solve threats to groundwater. Together, we can ensure a clean and reliable water supply, protect ratepayers and protect long-term property values.

QUESTIONS?

Bill Leever, PG, CHg
Principal Hydrogeologist

Orange County Water District
18700 Ward Street, Fountain Valley, CA 92708
(714) 378-3200
info@ocwd.com
www.OCWD.com





Department of
Toxic Substances
Control



CalEPA
California Environmental
Protection Agency

Status update on Industrial Sites within South Region Basin Santa Ana

MARCH 29, 2023 @ 6PM

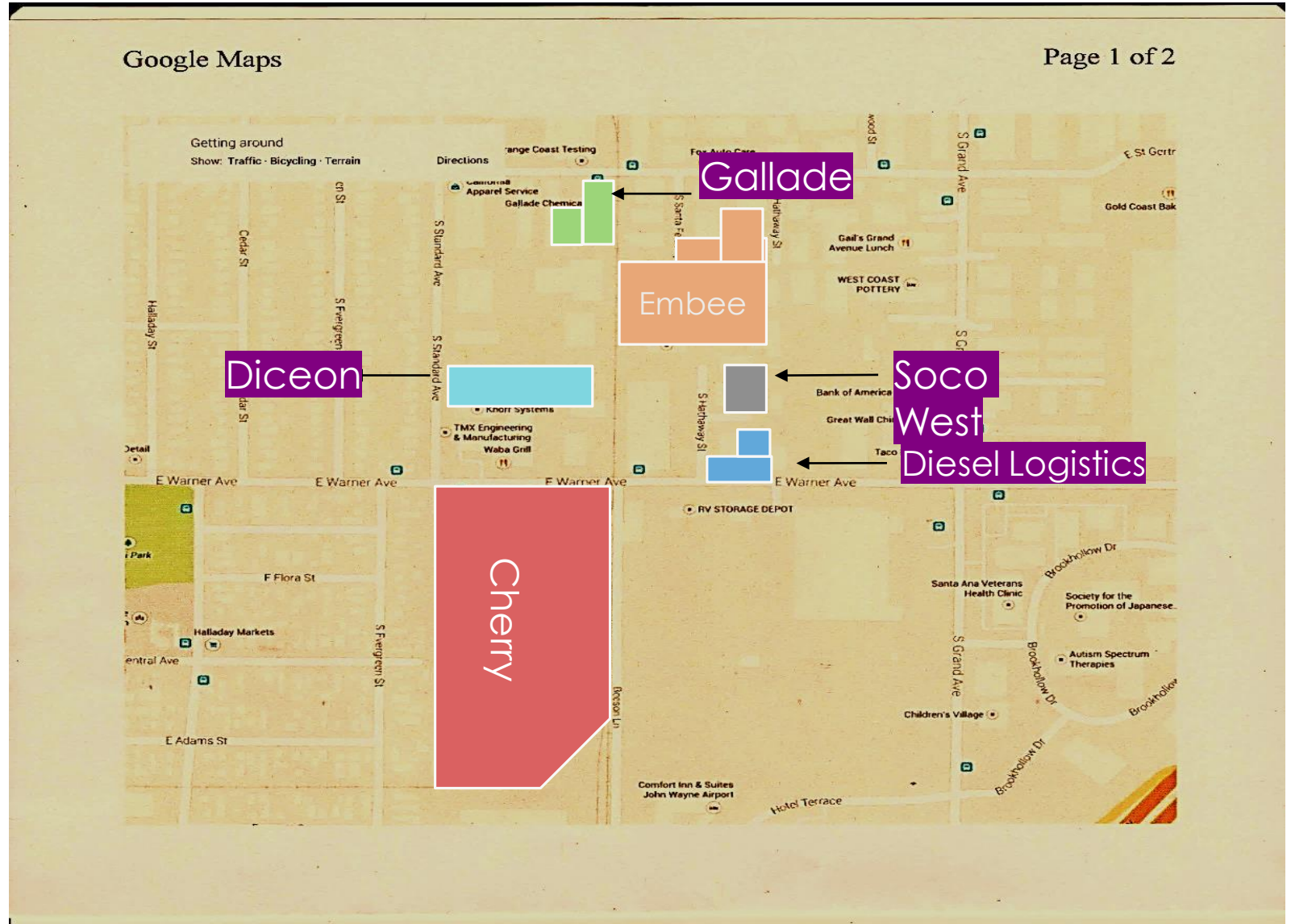


DTSC is a State Agency

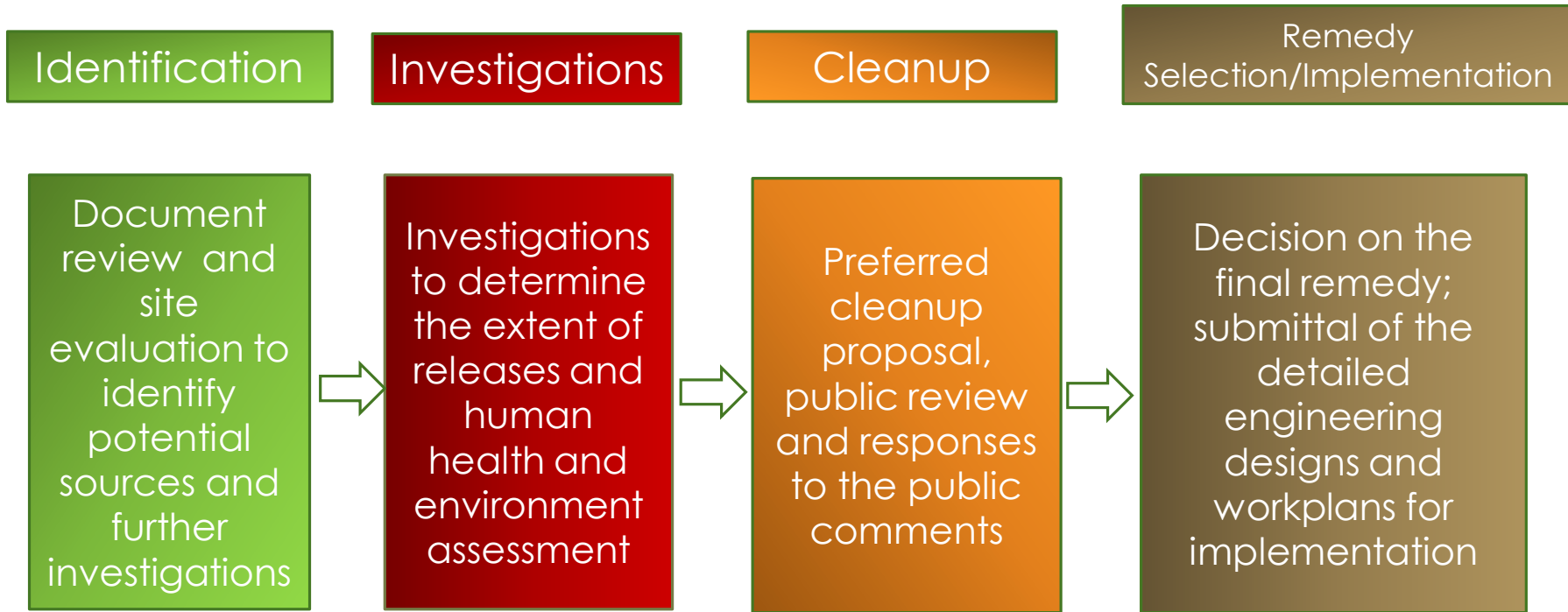
- DTSC is a State Agency that is part of California EPA
- DTSC Regulates:
 - Hazardous Wastes
 - Issues Permits, Tracks Hazardous Wastes Shipments, and conducts Inspections
 - Promotes Pollution Prevention & Safer Consumer Products
 - Conducts and oversees cleanup of
 - Soil and Groundwater



DTSC's Roles in Cleanup Oversight



Cleanup Process



Interim measures to control the movement of contaminants can be applied at anytime



Information Access

- DTSC Main Website: <https://www.dtsc.ca.gov>
- EnviroStor : <https://envirostor.dtsc.ca.gov/public/>



Information Access – DTSC Website

The screenshot shows the DTSC website's navigation menu. At the top, there is a blue header with the CA.GOV logo, social media icons (Facebook, Twitter, YouTube, Instagram, LinkedIn), and links for Newsroom, Publications & Forms, Calendar, and Contact Us. A language selector and settings icon are also present. Below the header, the DTSC logo is on the left, and a row of icons with labels is in the center: Hazardous Waste, Site Mitigation, Safer Consumer Products, Chemistry, Get Involved, Laws & Regulations, About DTSC, and Search. The 'Get Involved' menu is expanded, showing a grid of options. An orange arrow labeled '1' points to 'Environmental Justice', and a green arrow labeled '2' points to 'EnviroStor'.

Accessing Public Records	DTSC Calendar	Environmental Justice	EnviroStor
Office of Civil Rights	Office of Environmental Equity	Public Meetings	Public Notices
Public Participation	Report an Environmental Concern	Sign Up for an E-List	Supplemental Environmental Projects
Tribal Affairs			

How to use EnviroStor

The screenshot shows the EnviroStor website interface. At the top left is the CA.GOV logo. In the center is the text 'DEPARTMENT OF TOXIC SUBSTANCES CONTROL' above the 'ENVIROSTOR' logo. To the right of the logo is a yellow box containing the word 'Help!' with a red arrow pointing to the 'How to Use EnviroStor' menu item. Below the logo is a navigation bar with icons for home, calendar, and a mail icon, and text for 'Tools', 'Reports', 'Community Involvement', 'How to Use EnviroStor', 'ESI', and 'DTSC Web'. Below the navigation bar is a search bar with the placeholder text 'Search' and a magnifying glass icon. Below the search bar is a yellow box containing the text 'Basic Search / Map View' with a red arrow pointing up to the search bar. Below this is the 'EnviroStor' section header, followed by a paragraph: 'EnviroStor is the Department of Toxic Substances Control's data management system for tracking our cleanup, permitting, enforcement and investigation efforts at hazardous waste facilities and sites with known contamination or sites where there may be reasons to investigate further.' Below this paragraph is another paragraph: 'To search for specific cleanup sites or hazardous waste facilities, use the [Site / Facility Search](#) tool. Need help with searching or utilizing EnviroStor? Please visit our [How to Use EnviroStor](#) page.' To the right of this paragraph is a yellow box containing the text 'Advanced Search' with a red arrow pointing up to the 'Site / Facility Search' link.



How to use EnviroStor Advanced Search

Site / Facility Search

CITY:
Santa Ana

ZIP:

COUNTY:

SITE CODE, ENVIROSTOR ID #, EPA ID #, HWIS ID CODE:

SITE / FACILITY NAME:

Filter By Program Type

Cleanup Sites [SELECT ALL](#) / [DESELECT ALL](#)

- Federal Superfund Sites (NPL)
- State Response Sites
- Voluntary Agreement Sites
- School Cleanup Sites
- Corrective Action Sites
- Tiered Permit Sites
- Evaluation / Investigation Sites

Hazardous Waste Facilities [SELECT ALL](#) / [DESELECT ALL](#)

- Permitted - Operating
- Post-Closure Permitted
- Historical Non-Operating

Inspection, Compliance and Enforcement

- Permitted Facilities with Inspections / Enforcements
- Non-Permitted Facilities with Inspections / Enforcements

Advanced Search

Facility Name

Click Search



EnviroStor Result View

PROJECT SEARCH RESULTS STATUS: All Statuses

SEARCH CRITERIA: SANTA ANA

166 RECORDS FOUND [EXPORT TO EXCEL](#) PAGE 1 OF 4

SITE / FACILITY NAME	ESTOR / EPA ID	PROGRAM TYPE	STATUS	ADDRESS DESCRIPTION	CITY	ZIP	CALENVIROSCREEN SCORE	COUNTY
[REPORT] [MAP] (CRAPP), SANTA ANA AREA	8000028	MILITARY EVALUATION	INACTIVE - NEEDS EVALUATION		SANTA ANA		30-35%	ORANGE
[REPORT] [MAP] ABA BUILDING & TOOLING, INC.	7100001	TIERED PERMIT	NO FURTHER ACTION	1100 E. FORTUNA STREET	SANTA ANA	92705	80-85%	ORANGE
[REPORT] [MAP] ACCURATE CRUISE SHOPS	7100006	TIERED PERMIT	NO ACTION REQUIRED	3010 ALBION DRIVE	SANTA ANA	92707	85-90%	ORANGE
[REPORT] [MAP] ABE BUILDING	8070004	EVALUATION	REFER: 1248 LOCAL AGENCY	2020 NORTH GRAND AVENUE	SANTA ANA	92705	55-60%	ORANGE
[REPORT] [MAP] ACTIVE PLAYING	7100002	TIERED PERMIT	INACTIVE - NEEDS EVALUATION	1011 E. FORTUNA	SANTA ANA	92705	80-85%	ORANGE

Click  "Report"



The screenshot displays the EnviroStor website interface. At the top, the CA.GOV logo is on the left, and the text 'DEPARTMENT OF TOXIC SUBSTANCES CONTROL ENVIROSTOR' is centered. A navigation bar below contains icons for home, calendar, and a mail icon, along with menu items: Tools, Reports, Community Involvement, How to Use EnviroStor, ESI, and DTSC Web. The main content area shows site details for '1000 E. WASHINGTON STREET, SANTA ANA, CA 92705, ORANGE COUNTY'. A yellow box labeled 'Additional Information' points to the 'SITE TYPE: CORRECTIVE ACTION' text. To the right, a yellow box labeled 'DTSC Contact Information' has an arrow pointing to the 'PROJECT MANAGER: MANJUL BOSE' and 'SUPERVISOR: ANDRES CANO' text. Below this, 'OFFICE: SOUTHERN CALIFORNIA SCHOOLS & BROWNFIELDS OUTREACH' is listed, along with 'CENSUS TRACT: 6059074003' and 'CALENVIROSCREEN PERCENTILE SCORE: 85-90%'. A horizontal menu below the site info includes 'Summary', 'Activities', 'Community Involvement', 'Site/Facility Docs', 'Map', 'Related Sites', and 'CalEnviroScreen'. The 'Site Information' section is highlighted in green and contains 'CLEANUP STATUS: ACTIVE AS OF 5/7/2009', 'SITE TYPE: CORRECTIVE ACTION', 'NATIONAL PRIORITIES LIST: NO', 'ACRES: 11.45 ACRES', 'APN: 075-150-00', and 'CLEANUP OVERSIGHT AGENCIES: DTSC - SITE CLEANUP PROGRAM - LEAD AGENCY, ORANGE COUNTY, RWQCB 8 - SANTA ANA'. To the right of this section are fields for 'ENVIROSTOR ID', 'SITE CODE', 'SPECIAL PROGRAM', 'FUNDING: RESPONSIBLE PARTY', 'ASSEMBLY DISTRICT: 68', and 'SENATE DISTRICT: 34'. The 'Regulatory Profile' section is also highlighted in green at the bottom.



DTSC Contact's

	Embee / Cherry / Diceon / Gallade	SoCo West / Diesel Logistics	OCWD GW
Project Manager	Manjul Bose (818) 717-6560	Farah Itani (714) 484-5471	Nicholas Ta (714) 484-5381
Environmental Justice Coordinator: Todd Sax			



Glossary

- PCE - Perchloroethylene (degreaser solvent, drycleaning solution)
- TCE – Trichloroethylene (degreaser solvent)
- SVE – Soil Vapor Extraction System (technology for cleanup solvents in vapor)
- DPE – Dual Phase Extraction (soil vapor and groundwater cleanup)
- ERH – Electrically Resistive Heating (heat soil to help cleanup soil vapor)
- ISCO – In-Situ Chemical Oxidation (inject chemicals to cleanup groundwater)
- EISB – Enhanced In-Situ Bioremediation (inject bacteria to cleanup groundwater)
- PRB - Permeable Reactive Barrier, ZVFe – Zero Valent Iron is one technology



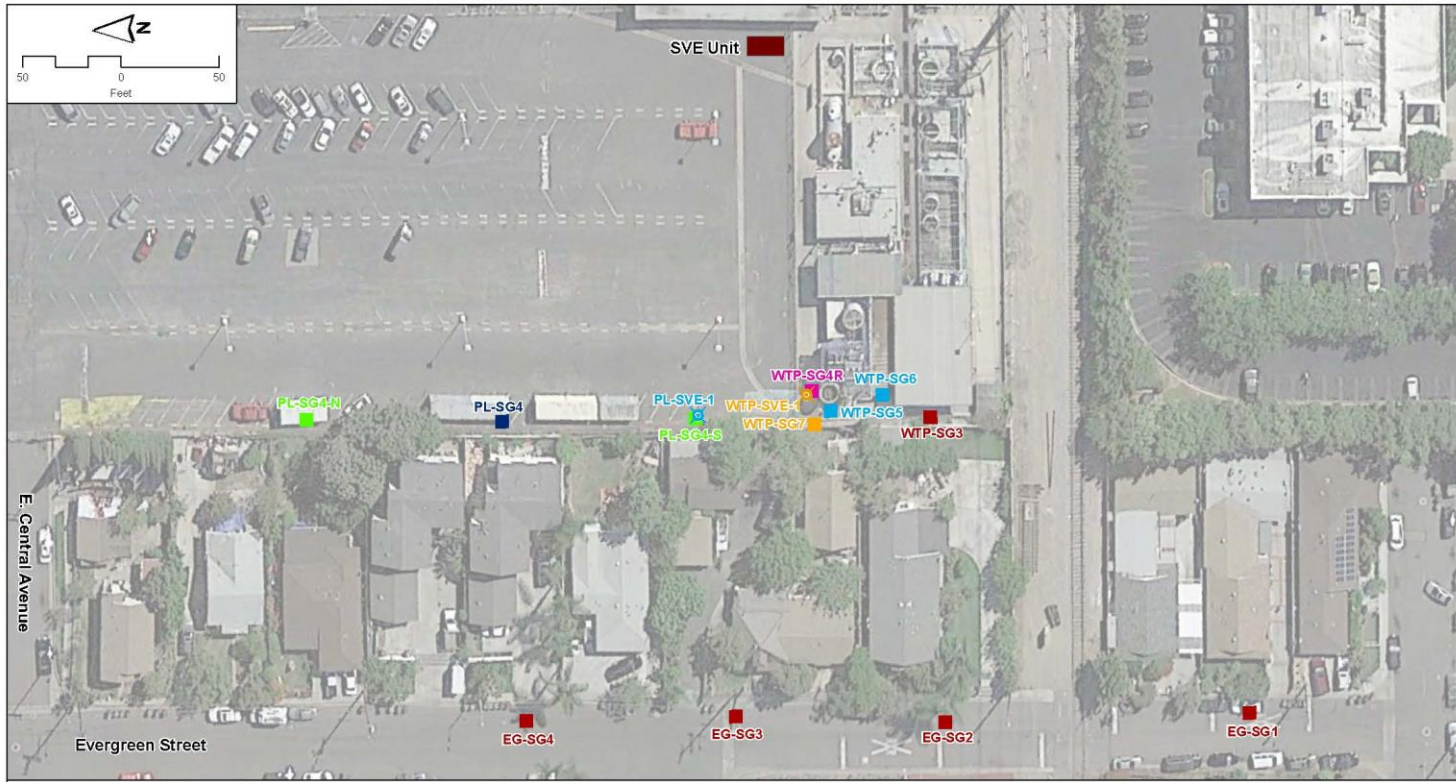
Cherry Aerospace / Textron Inc.

EnviroStor Code: 60001102

- Approved a SVE Pilot Study workplan (2017)
- Soil Vapor Extraction (SVE) system running under an extended pilot test in the south western part of the facility since 2019.
- SVE system is effective and continues to protect the community from chemicals in soil vapor from extending off property.
- Construction of combined on-site and off-site interim measures estimated to start Fall 2023 – subject to final permitting approvals

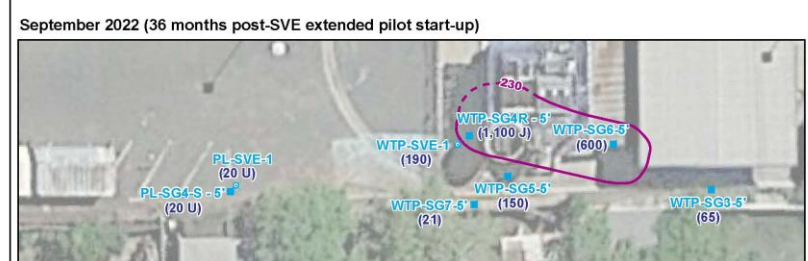
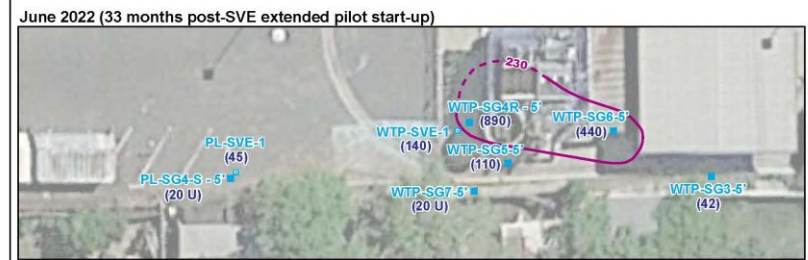
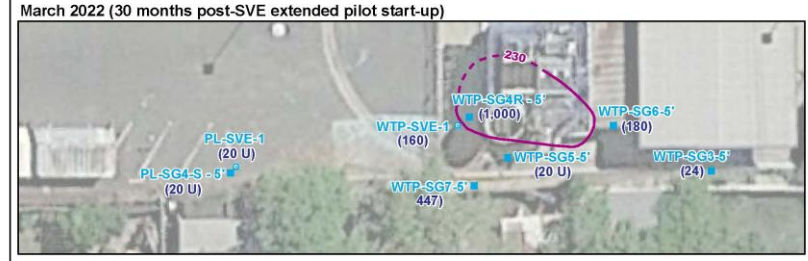


Cherry Aerospace



Cherry Aerospace
 (Former Textron Fastening Systems)
 1224 East Warner Avenue
 Santa Ana, California 92705
 Soil Gas and Soil Vapor Extraction (SVE) System Locations
 (2011 - 2022)
Figure 1

Source: GoogleEarth Pro (Image Date: April, 2014). Basemap provided by Cherry Aerospace.
 Project: 1727-241811



Source: GoogleEarthPro (Image Date: April, 2014). Basemap provided by Cherry Aerospace.

Legend

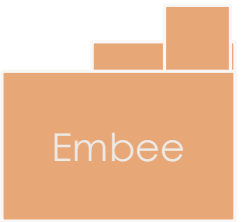
- Shallow Soil Vapor Extraction (SVE) Well Location
- Vapor Monitoring Probe Location
- Tetrachloroethene (PCE) contours, dashed where inferred

NOTES:

- PCE Residential Risk Based Screening Level: 250 µg/m³
- PCE Industrial / Commercial Risk Based Screening Level: 2,000 µg/m³
- Concentrations in vapor monitoring probes to West along S. Evergreen Street are all below the residential Risk-Based Screening Level.
- SVE system installed June 2017.
- U - Non-detect result at a reporting limit
- J - Estimated Value
- Historical SVE PCE plume trends are shown in Appendix G, Figures G-1 through Figure G-4.

Cherry Aerospace
 (Former Textron Fastening Systems)
 1224 East Warner Avenue
 Santa Ana, California 92705
 Soil Vapor Extraction Pilot Test
 Tetrachloroethene Plume (March 2022 - December 2022)
Figure 2





EnviroStor Code: 30340013

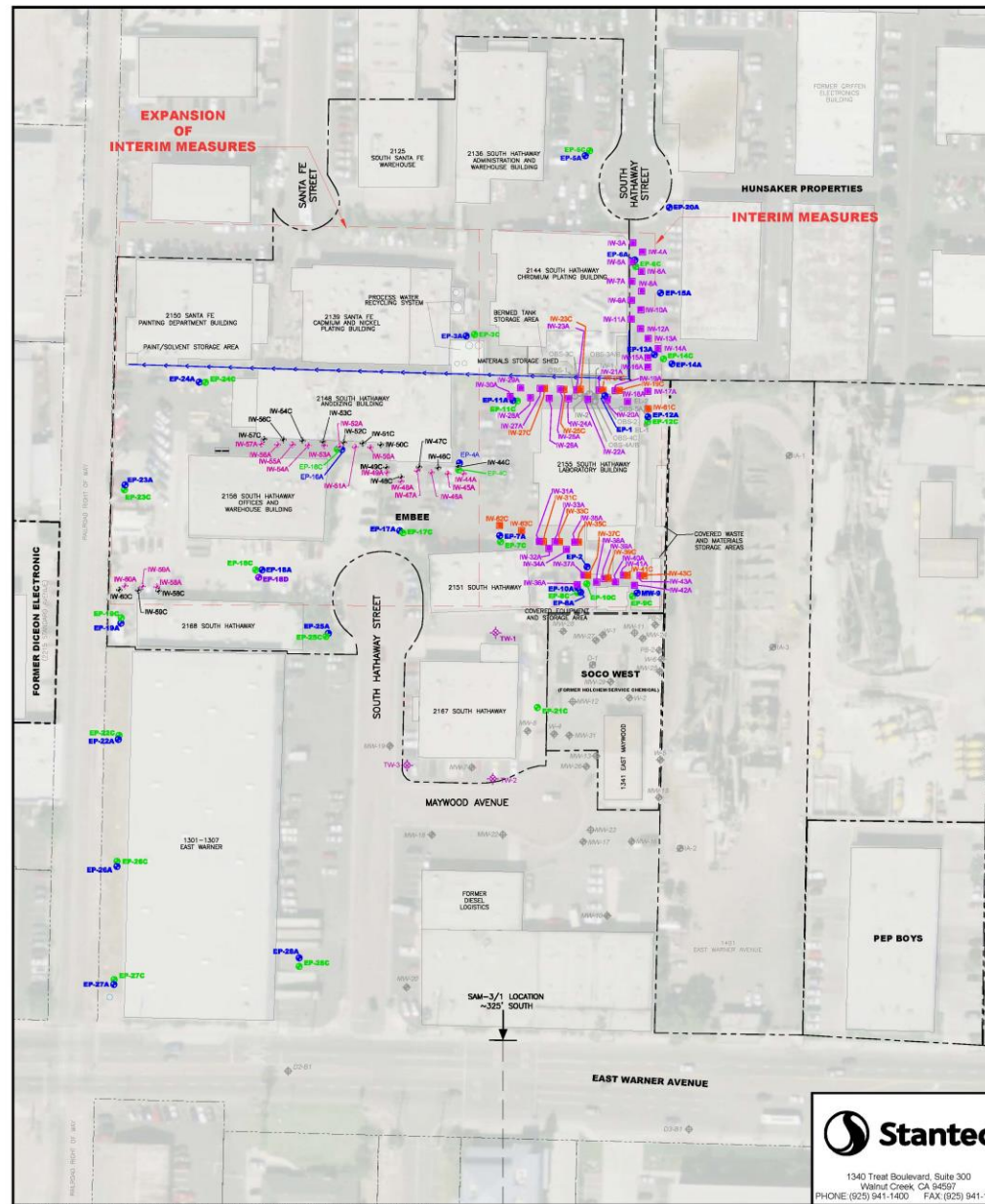
Embee Processing, Inc.

- Proposed Interim Measure (IM) cleanup
 - Bioremediation cleanup – it is the use of small naturally occurring microorganisms to cleanup contaminated soil and groundwater.
 - ERH with SVE Cleanup – use of Electrically heated soils in conjunction with soil vapor extraction to remove solvents from soils and groundwater.
- Next Steps: Interim Measures for ERH + SVE cleanup for public comment period soon.



Embee Plating

Figure shows Bioremediation Injection wells on property



LEGEND:

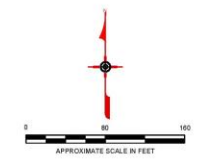
- TW-1 TEMPORARY WELL SCREENED WITHIN 49'-59" bgs
- IW-21A INTERIM MEASURES INJECTION/RECIRCULATION WELL SCREENED WITHIN 9.5'-49' bgs
- IW-21C INTERIM MEASURES INJECTION/RECIRCULATION WELL SCREENED WITHIN 49'-70' bgs
- IW-48A EXPANSION OF INTERIM MEASURES INJECTION/RECIRCULATION WELL SCREENED WITHIN 11'-45' bgs
- IW-49C EXPANSION OF INTERIM MEASURES INJECTION/RECIRCULATION WELL SCREENED WITHIN 49'-70' bgs
- EP-4A MONITORING WELL SCREENED WITHIN 9.5'-49' bgs
- EP-4C MONITORING WELL SCREENED WITHIN 39'-70' bgs
- EP-18D MONITORING WELL SCREENED WITHIN 115'-125' bgs
- IW-2 PILOT STUDY INJECTION WELL SCREENED FROM 5'-20' bgs
- OBS-3A/B PILOT STUDY OBSERVATION WELL SCREENED WITHIN 13'-30' bgs
- OBS-3C PILOT STUDY OBSERVATION WELL SCREENED WITHIN 44'-52' bgs
- EL-1 PILOT STUDY ELECTRODE WELL SCREENED FROM 6'-31' bgs
- MW-28 SOCO WEST MONITORING WELL SCREENED WITHIN 5'-34' bgs
- MW-12 SOCO WEST MONITORING WELL SCREENED WITHIN 37'-62' bgs
- IA-3 ABANDONED WELL LOCATION
- CONCRETE LINED STORMWATER CHANNEL
- APPROXIMATE LIMITS OF PROPERTY UNDER OWNERSHIP OR LEASE BY EMBEE PROCESSING
- APPROXIMATE PROPERTY FORMER DICEON ELECTRONICS
- GROUNDWATER TREATMENT ZONE

NOTES:

- 1 SOCO WEST WELL DETAILS FROM GROUNDWATER REPORT PREPARED BY ARCADIS.

REFERENCES:

COORDINATE SYSTEM:
 NAD 83, CA STATE PLANE, ZONE VI, US FOOT
 AERIAL IMAGE FROM Digital Globe 2010



<p>1340 Treat Boulevard, Suite 300 Walnut Creek, CA 94597 PHONE: (925) 941-1400 FAX: (925) 941-1401</p>	FOR:	EMBEE PROCESSING 2136 SOUTH HATHAWAY SANTA ANA, CALIFORNIA		FIGURE:	2
	JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
	185704056.200.0003	RRR	SP/BES	GH	10/28/22



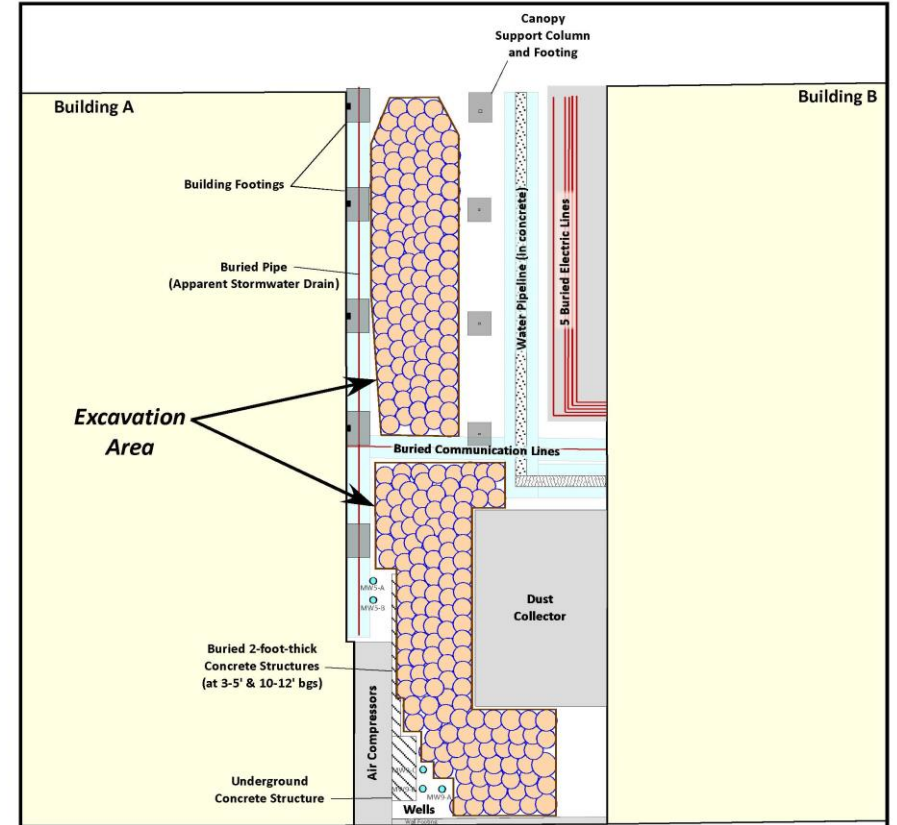
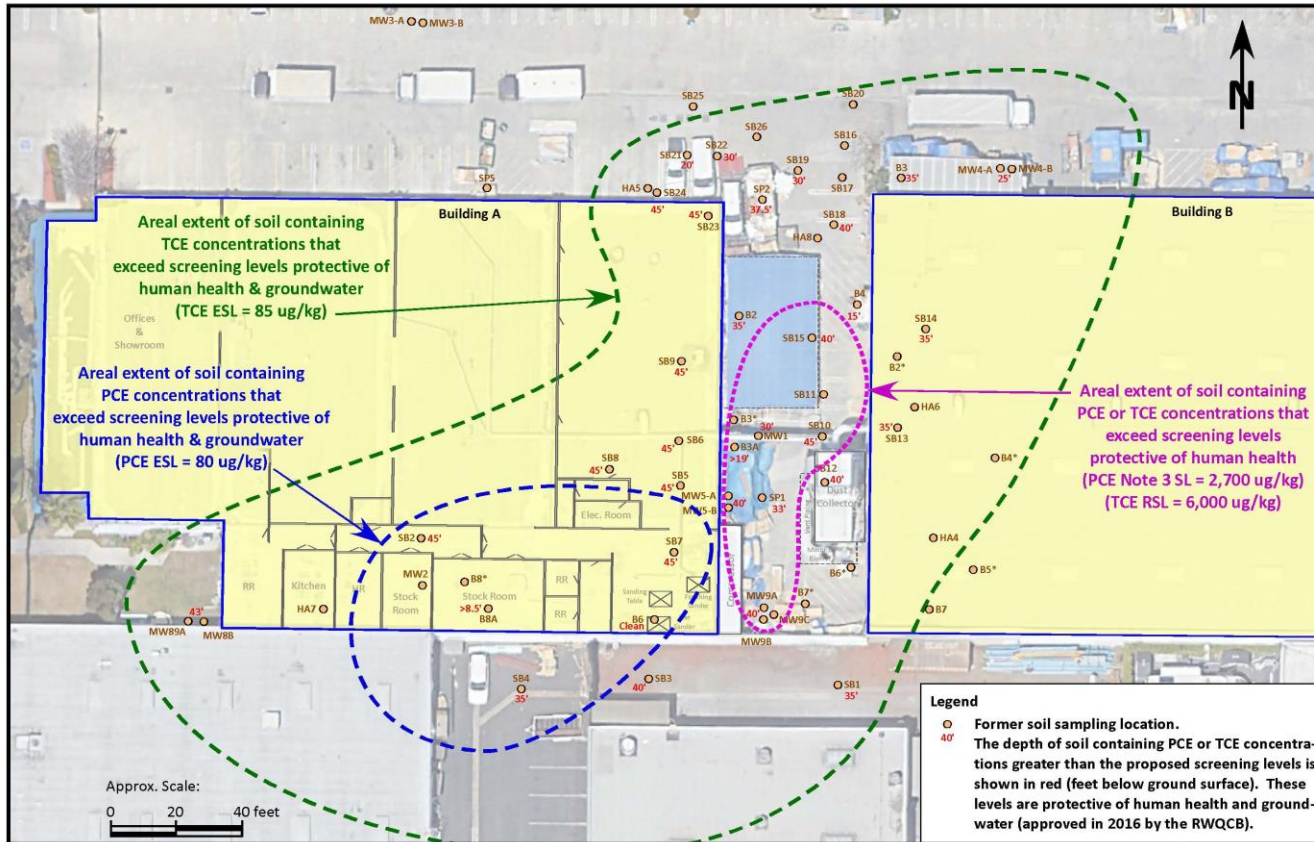
Former Diceon Electronics

EnviroStor Code: 60001271

- Groundwater monitoring wells installed offsite March 2019.
- Interim Remedial Action Plan (IRAP) approved in June 2021. Plan includes excavation of 5 areas, and ISCO ZVFe groundwater injection – in separate phases
- Phase 1 – excavation of area between Bldg A & Bldg B. Approved remedial action in January 2022.
- DTSC working with property owner on next phase of IRAP



Diceon Electronics



ESTIMATED AREAL EXTENT OF IMPACTED SOIL
2215 Standard Avenue, Santa Ana, California

Project No.: 19021

Date: October 2021

Figure No.
3



SOIL EXCAVATION LOCATION MAP
2215 Standard Avenue, Santa Ana, California

Project No.: 19021

Date: October 2021

Figure No.
4



Gallade Chemical, Inc.

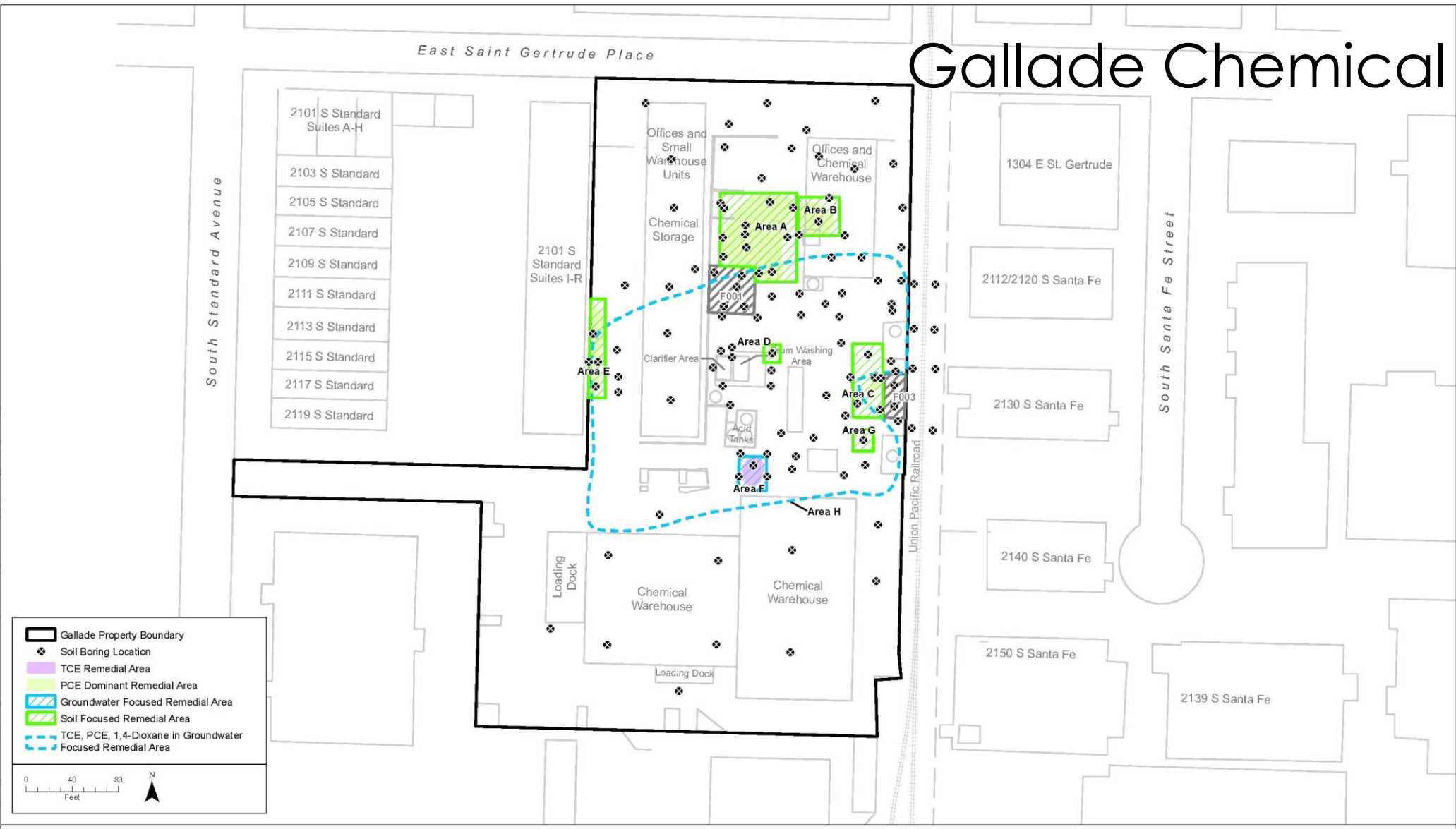
EnviroStor Code: 80001356

- RAP approved by RWQCB in 2016 – planned phases in 15 years.
- Focus areas divided into areas A through H
- Area A : Completed, 1,300 cubic yards of soil removed – completed September 2019, Approved May 2020.
- Area C : Completed, 203 tons of VOC impacted soil removed. Area C approved by DTSC in May 2021.
- Current Status : Area G Approval in process.



Gallade Chemical

N:\GIS\Projects\CS47 - Gallade_Closure\Production - MXDs\Area_G_Closure_Report\Figure 2 - Remed_Areas.mxd:1/21/2022 11:18:03 AM



	Gallade Property Boundary
	Soil Boring Location
	TCE Remedial Area
	PCE Dominant Remedial Area
	Groundwater Focused Remedial Area
	Soil Focused Remedial Area
	TCE, PCE, 1,4-Dioxane in Groundwater Focused Remedial Area

0 40 80 Feet

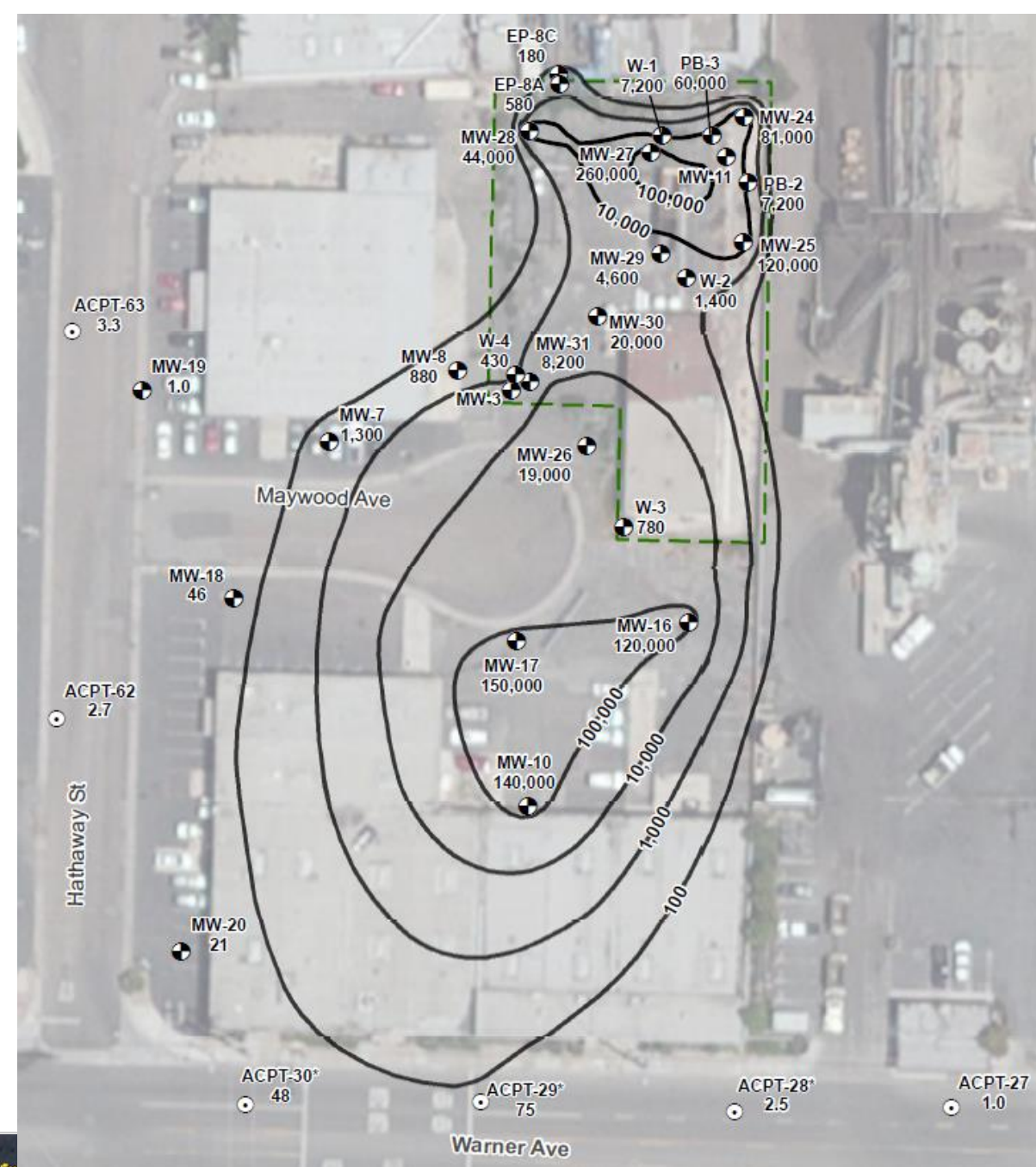
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Figure 2.
Gallade Revised RAP Remediation Areas



Soco West Inc./Former Holchem Facility

- Chemicals of concern include volatile organic compounds in soil, soil vapor, and groundwater.
- Interim corrective measures 1997 – 2009:
 - Soil vapor extraction
 - Dual phase (vapor and groundwater) extraction.



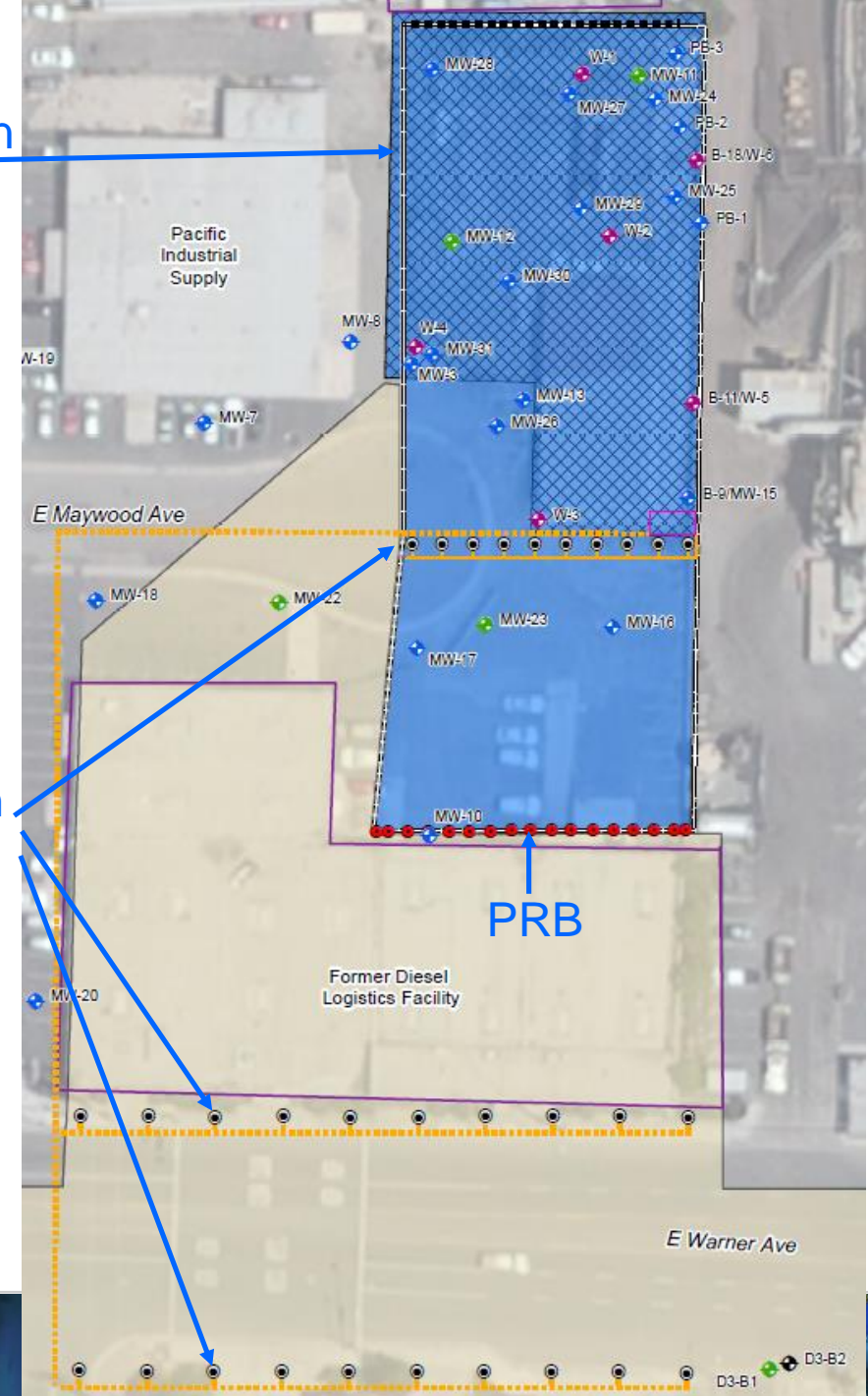
Soco West Inc./Former Holchem Facility

- Remedial Action Plan approved in August 2015:
 - Building demolition and surface cap
 - Groundwater treatment by enhanced in-situ bioremediation (EISB)
 - Permeable reactive barrier (PRB)
 - Land use covenant

Building Demolition & Surface Cap

EISB Injection Wells

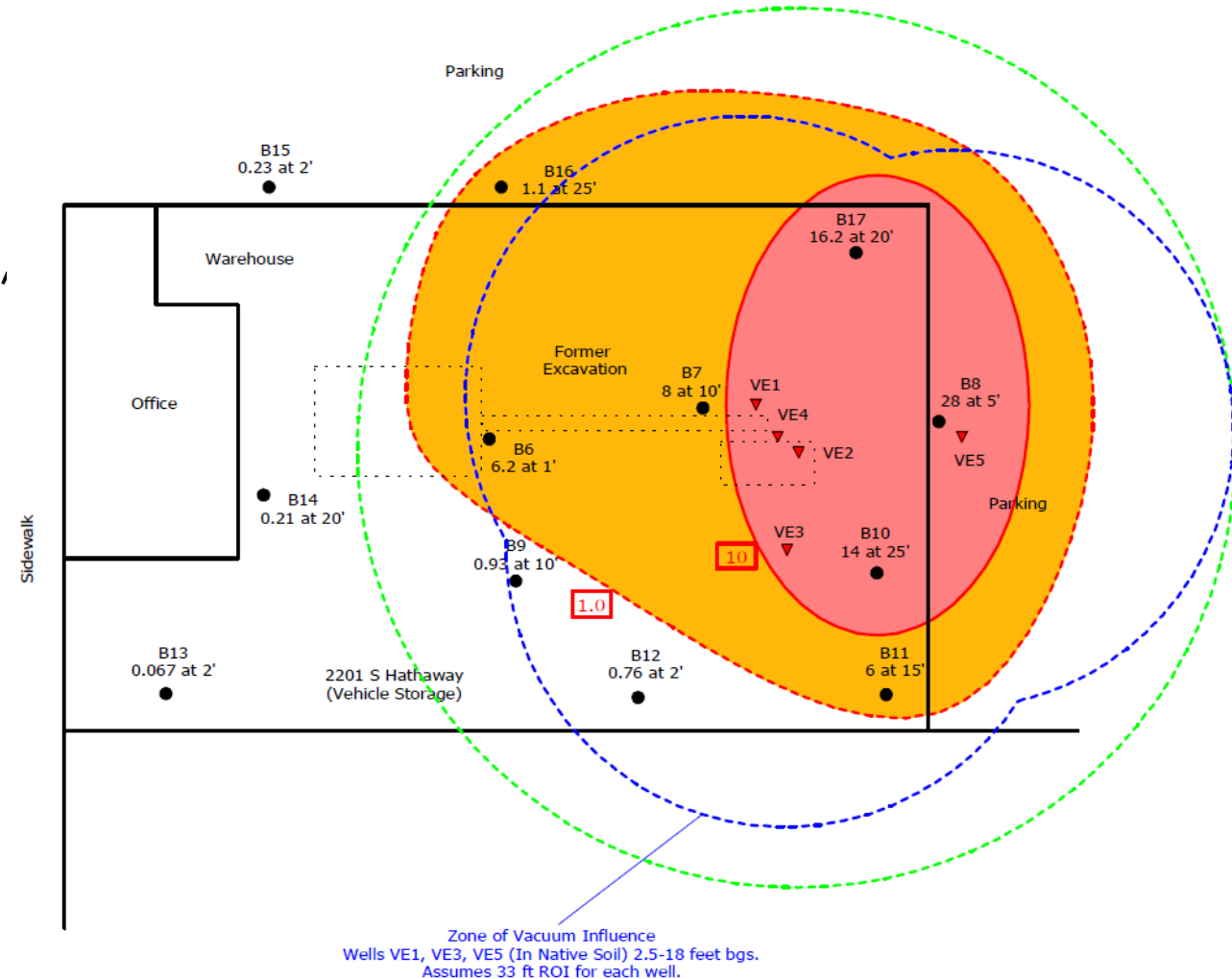
PRB



Diesel Logistics

- Chemicals of concern include volatile organic compounds in soil, soil vapor, and groundwater.
- Interim Removal Actions:
 - vapor intrusion mitigation measures including air purifiers and building ventilation fans installed in 2015
 - soil vapor extraction (SVE) started in 2018

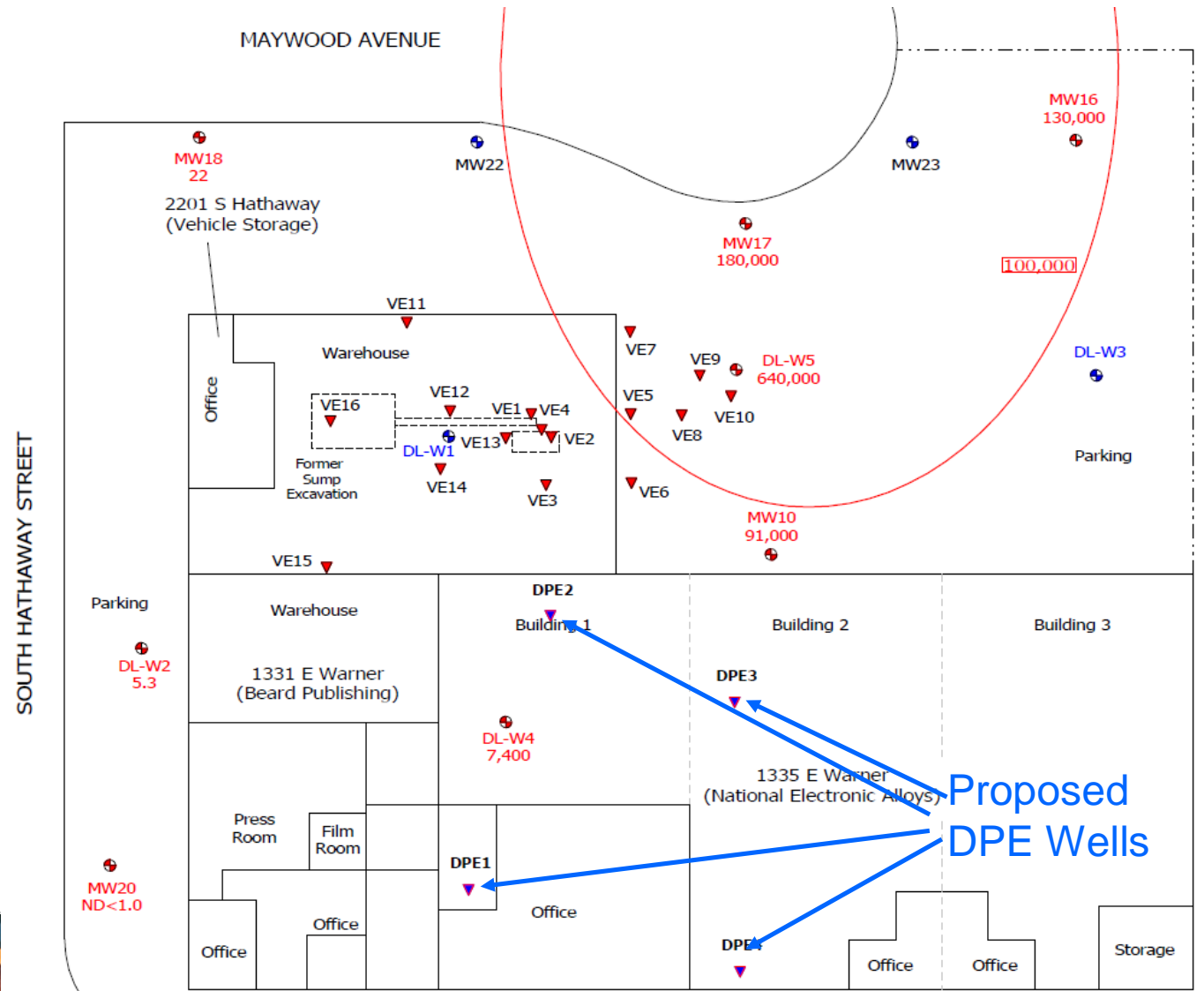
EnviroStor Code: 60001272



Diesel Logistics

EnviroStor Code: 60001272

- Interim Groundwater Removal Action Workplan approved in December, 2022, proposed
 - Dual phase extraction (DPE), to enhance SVE performance, and control groundwater contamination.



Questions?

