2025 CALIFORNIA LAND RECYCLING CONFERENCE
TRANSFORMING LAND, EMPOWERING COMMUNITIES

Let's Make it Magic, Not Tragic

What reforms are needed for sustainable infill reuse - Help us decide!

Jeff Adams, Principal Consultant
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Prosperity California
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New Way Homes
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Haley &Aldrich, Inc.

BROWNFIELDS AND LAND REVITALIZATION

OFFICE OF BROWNFIELDS
Department of Toxic Substances Control · Cleanup In Vulnerable Communities Initiative

CENTER FOR CREATIVE LAND RECYCLING
RECLAIM. CONNECT. TRANSFORM.

PROSPERITY CALIFORNIA

HALEY ALDRICH

NEW WAY HOMES

ENGEO
Expect Excellence

Geosyntec consultants
engineers | scientists | innovators

Let's Make it Magic, Not Tragic

CALRC 2025

Program - Share your Expertise!

- **Presentations of Case Studies/Example Projects (20 min)**
- **Breakout Groups (15-20)** - discuss common brownfields challenges and generate solutions.
- **Reflections (5)** - break for participants to go around the room and add ideas to each big post-it on the wall.
- **Bluesky Session (10)** - in same group as break out. What are solutions you have in mind to accelerate clean-up and redevelopment?
- **Close Out (5) -** use the colored dots next to vote for your favorite solutions! What are you excited to advocate for? What do you think will make a difference?

Cost of Living Crisis & Risks from Climate Change

- We have a **cost of living crisis in California,** housing is the biggest line item for family budgets.
- We need to build at least **2.5 million new housing units by 2030** to meet our needs and avoid more serious human and economic consequences. We build ~100,000 new units per year.
- We can't build our way out of our housing shortage and cost of living crisis one 20-unit building at a time. **To build at scale in our existing communities we need larger vacant and underutilized parcels. These are all brownfields.**
- Without clean-up, much of this **contaminated land is a ticking time bomb. As sea levels rise, so do groundwater levels** under dry land, causing soil contamination to seep into our waterways, ocean, and cracks in foundations and pipes.

Redeveloping Brownfields Benefits Communities

By passing strategic reforms, we can safely accelerate clean-up and deliver the following benefits for California:

- New **housing** where we need it most.
- Improved **health outcomes** by removing pollution.
- Increased local government **revenue**.
- **Vibrant, inclusive spaces** in formerly polluted and failing areas.
- **Protection of our communities** from sea level rise and the associated spread of pollution as our ground water levels push higher into previously dry soil.

Common Brownfield Challenges

- **Does the Rising Tide Raise all Boats?** - stakeholder engagement is a key element of success for any brownfield redevelopment project. Can we structure meaningful stakeholder engagement that can help accelerate clean-up? Can buy-in from communities be an asset for redevelopment versus a check box?
- **Double Jeopardy** - staff transitions that reopen approved clean-up plans? standards changing mid-project? 5-year reviews that ask projects to update a completed building to new standards? How can we safely reduce the incidence of double-jeopardy for brownfield projects?
- **Escaping Limbo** - been waiting for a response for a year? Your regulator contact as frustrated with delays as you are? How can we help projects that are held up by review process or capacity limits get the approvals they need on reports and timely determination letters? Are there technical fixes to clean-up standards and evaluation that could help accelerate oversight while maintaining safety?
- **Better than One in a Million** - are screening levels that target one in a million cancer risk being used as clean-up standards for your project? Should screening and clean-up targets be the same? What's the risk of leaving pollution in the ground if clean-up standards aren't achievable and projects don't move forward? Does this compromise the likelihood of redevelopment and associated clean-up?

Case Studies/Example Projects

Escaping Limbo

NEW WAY HOMES

SERENA COLLINS
Development Manager


NEW WAY
HOMES
RESTAURANT

431

Project Milestones

NEW WAY HOMES

Year	Milestone	Description
2018	Phase I Site Assessment	Initial site evaluation conducted to identify potential contamination.
2020	Phase II & Cleanup Plan	Detailed assessment completed and cleanup plan approved with additional monitoring required.
2021–2022	Funding Secured	DTSC funding applied for and successfully awarded.
2022–2023	Delays & Permits	NEPA compliance, permitting delays, and moratoriums stalled progress.
2023	Cleanup Begins	Initial on-site cleanup activities commenced.
Late 2023–2024	Unexpected Roadblock	Work paused due to winter moratorium; discovered more contamination and funding shortfall; seeking additional funds.
Jan & Jun 2025	Additional Funding Approved	Additional funding secured in January and June 2025.
2025–2026	Delayed Restart	More testing revealed; cleanup restart now planned for April 2026.

What's Held Us Back?

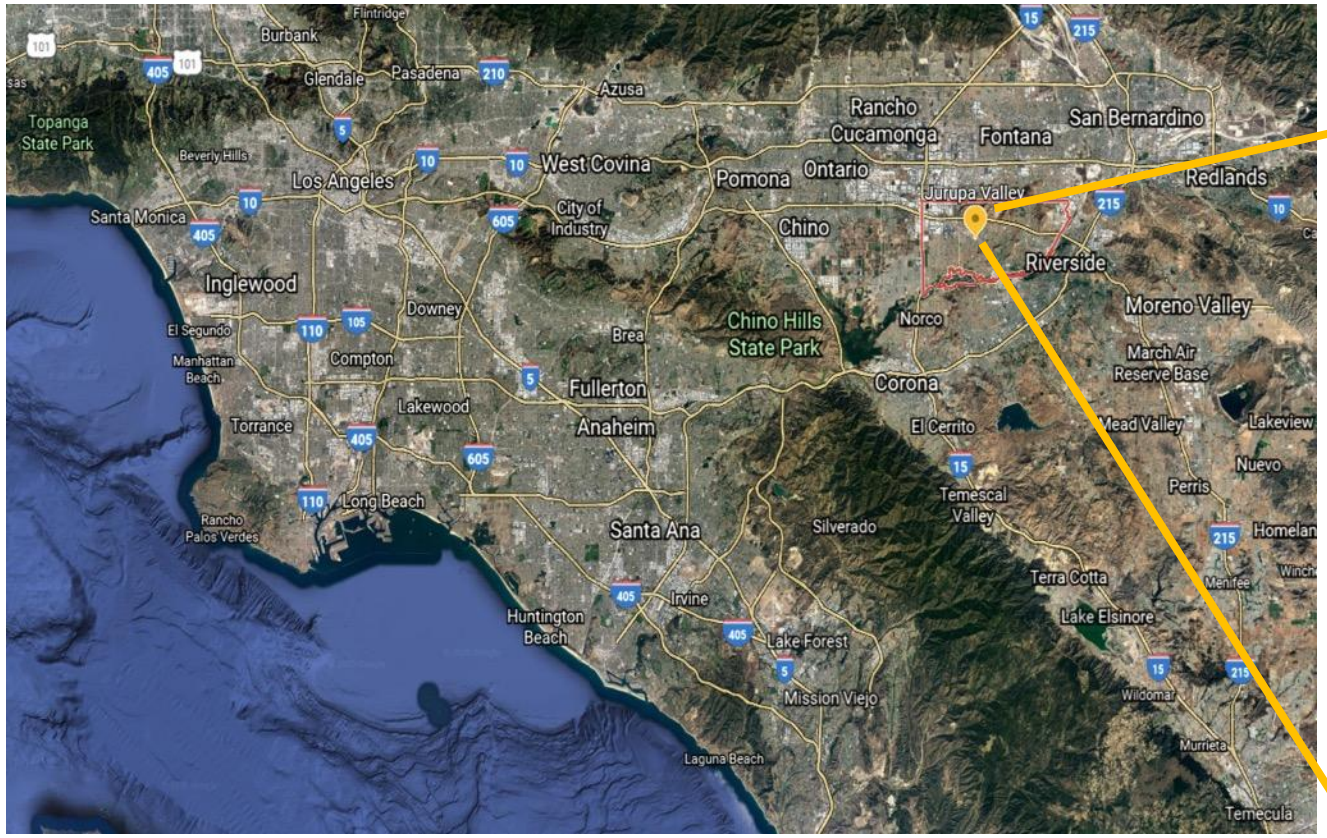
- Funding
- Testing timelines*
- NEPA requirements
- Winter Moratoriums
- Permitting timelines
- Communication
- Knowledge of alternative pathways

Community Engagement

Let's Make it Magic, Not Tragic: Does the Rising Tide Raise all Boats?

Rafat Abbasi, P.E
Senior Consultant
Geosyntec Consultants
rafat.abbasi@geosyntec.com

Site Location



292 acre site in SoCal's Inland Empire/active since 1906/defunct since 2014

COMMUNITY ENGAGEMENT

Case Study- Aqua Mansa Industrial Park

Engage early

- In the planning stages of cleanup plan to have a better idea of what **community priorities** are
- More in-depth collaboration with intent to **obtain community input** of what community

Emphasize public health protection

- Cleanup will **remove** contaminated soil and **reduce** exposure risks.

Communicate economic opportunities

- Industrial Park redevelopment, which can bring **new jobs, local revenue, infrastructure improvements and revitalization** to the Jurupa Valley area.

Focus on long-term protection

- Engineering controls such as **impervious surfaces and clean soil caps** and **Land Use Covenants** to prevent future exposure, ensuring the site remains safe for public use.

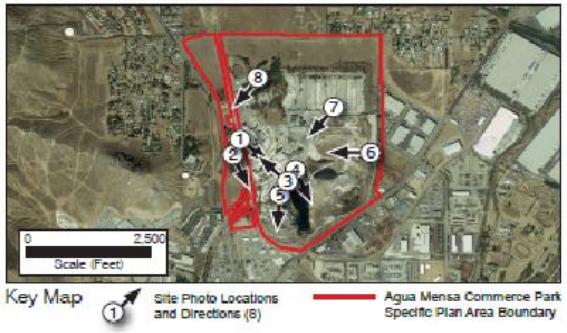
A Cement Plant Time Forgot!

1. Silos at the site

2. Material Conveyance

3. Cement Kiln

4. Lake during Flooding



5. Bag House

6.

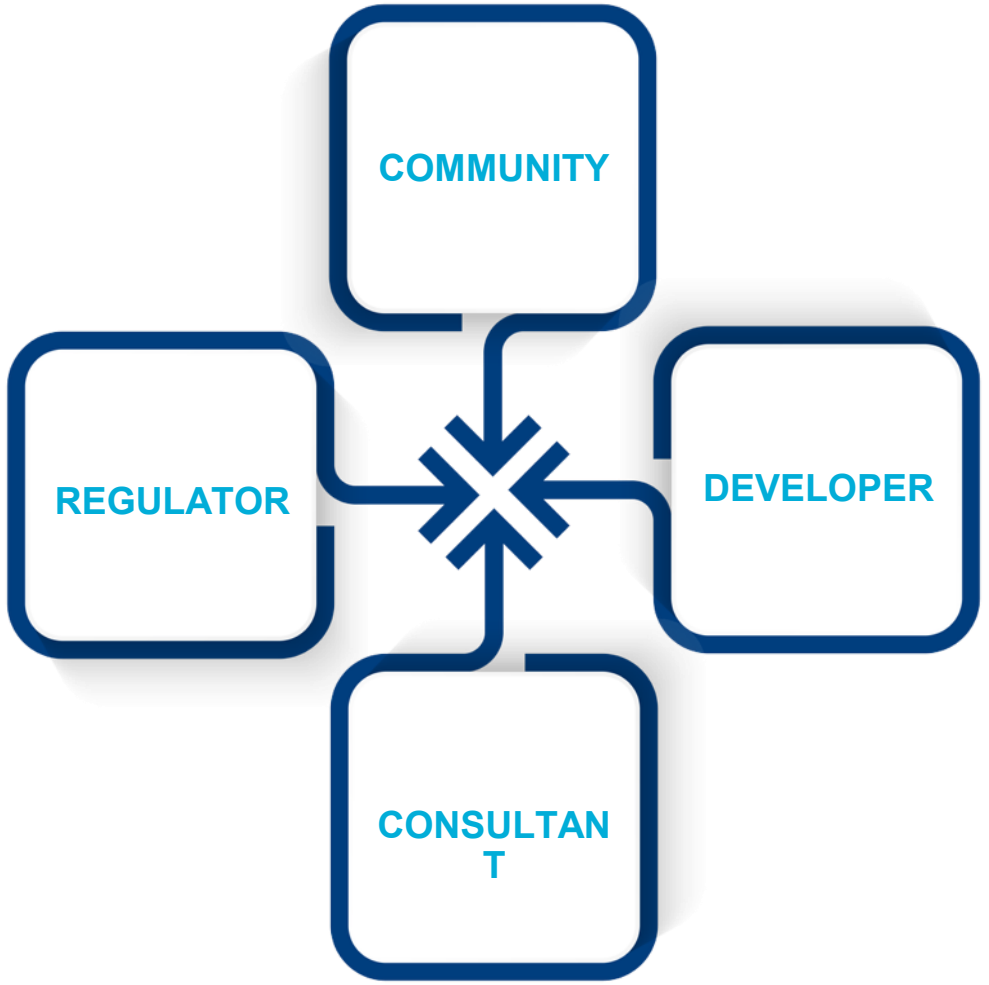
7.

8.

Overcoming Roadblocks

Community Engagement

Regulatory Barriers

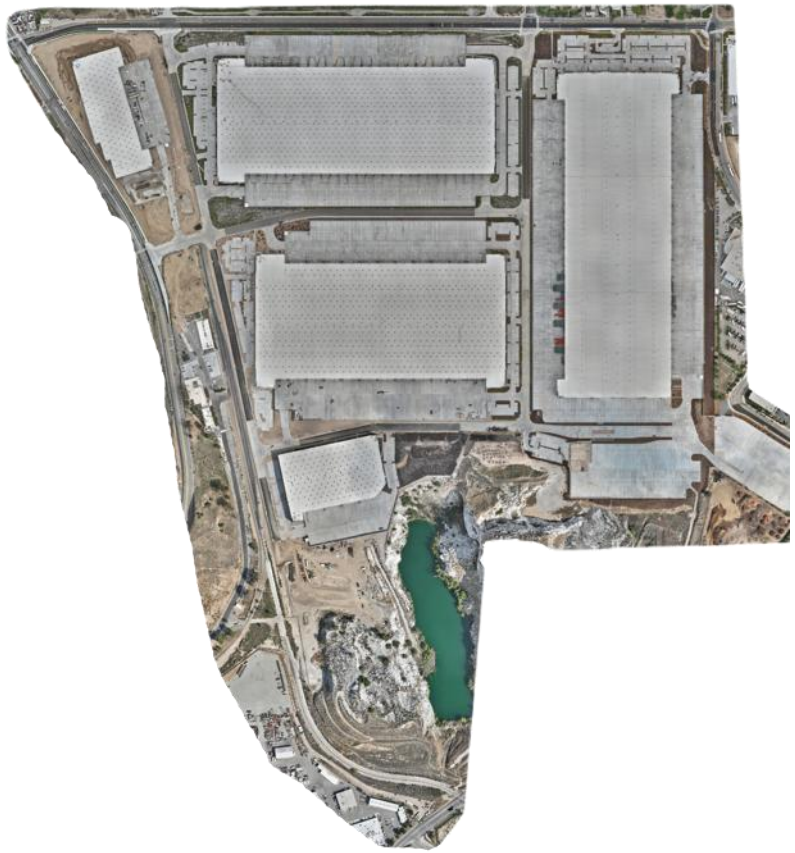


Investment in Community

January 2021

1) **Eliminate** a public environmental hazard.
2) **Provide** economic benefits through tax revenues and other fees.
3) **Improve** public infrastructures.
4) **Facilitate** Job Growth.
5) **Incorporate** strategies to minimize consumption of natural resources.
6) **Draw in** Fortune 500 Tenants and businesses to the City.

September 2023



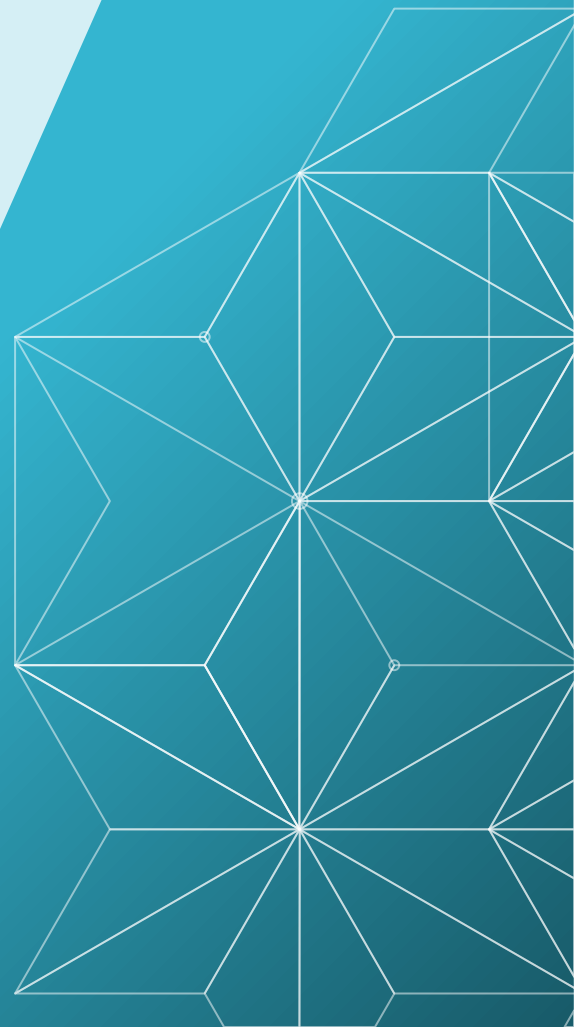
HALEY ALDRICH

Better than 1 in a million: *is this approach really warranted and sustainable for addressing the vapor intrusion pathway?*

Gina Plantz

2025 California Land Recycling Conference

Carson, California



Why are some sites using environmental screening levels (ESLs) as cleanup goals?

- Residential ESLs (based on 10^{-6} risk) are the numbers readily available and easy to point to
  - Indoor air ESLs are based on a target excess lifetime cancer risk of one-in-a-million (10^{-6}) and a hazard quotient of 1 for non-cancer health effects
  - Soil vapor ESLs are based on (overly?) conservative estimations of attenuation from subsurface to indoor air
- If site conditions are less than ESLs, no action is warranted

The presence of a chemical at concentrations exceeding an ESL does not necessarily indicate adverse effects on human health or the environment, rather that additional evaluation is warranted.

Screening Levels ≠ Clean-Up Goal

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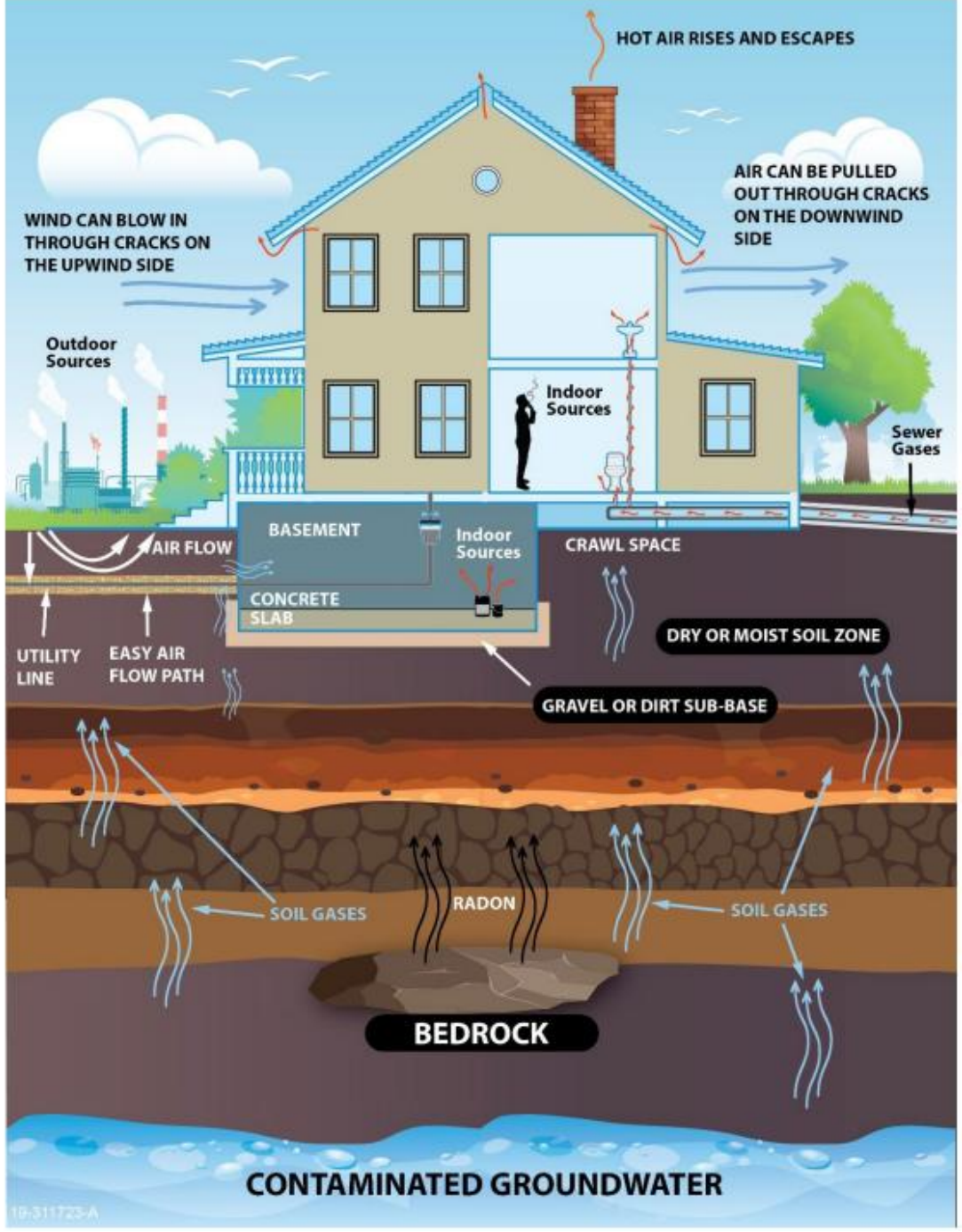
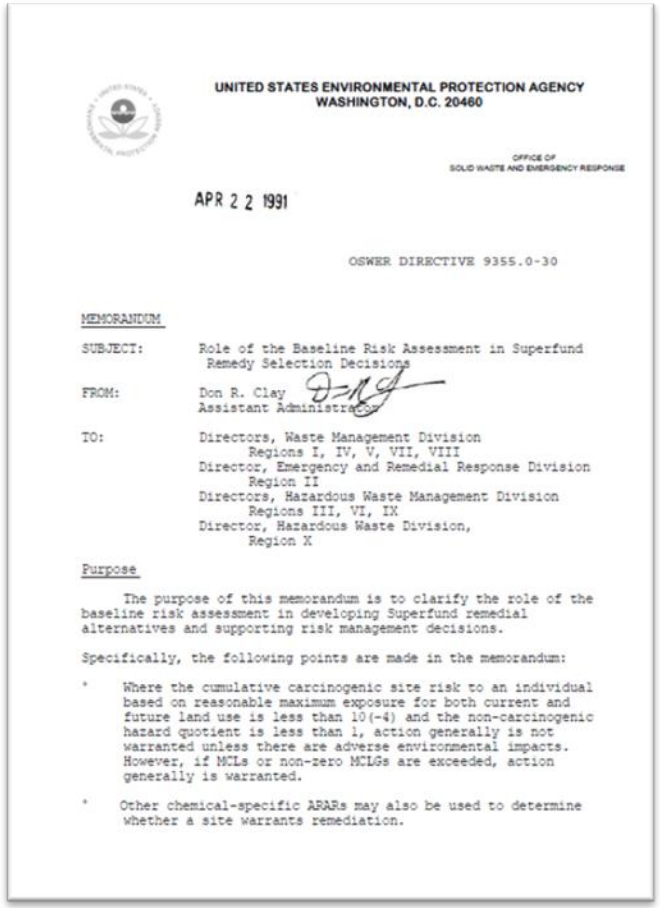
Derivations Matter



From ATSDR

Risk Management Framework (NCP and CA)

CalEPA uses USEPA 1991 Framework



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

APR 22 1991

OSWER DIRECTIVE 9355.0-30

MEMORANDUM

SUBJECT: Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions

FROM: Don R. Clay
Assistant Administrator

TO: Directors, Waste Management Division
Regions I, IV, V, VII, VIII
Director, Emergency and Remedial Response Division
Region II
Directors, Hazardous Waste Management Division
Regions III, VI, IX
Director, Hazardous Waste Division,
Region X

Purpose

The purpose of this memorandum is to clarify the role of the baseline risk assessment in developing Superfund remedial alternatives and supporting risk management decisions.

Specifically, the following points are made in the memorandum:

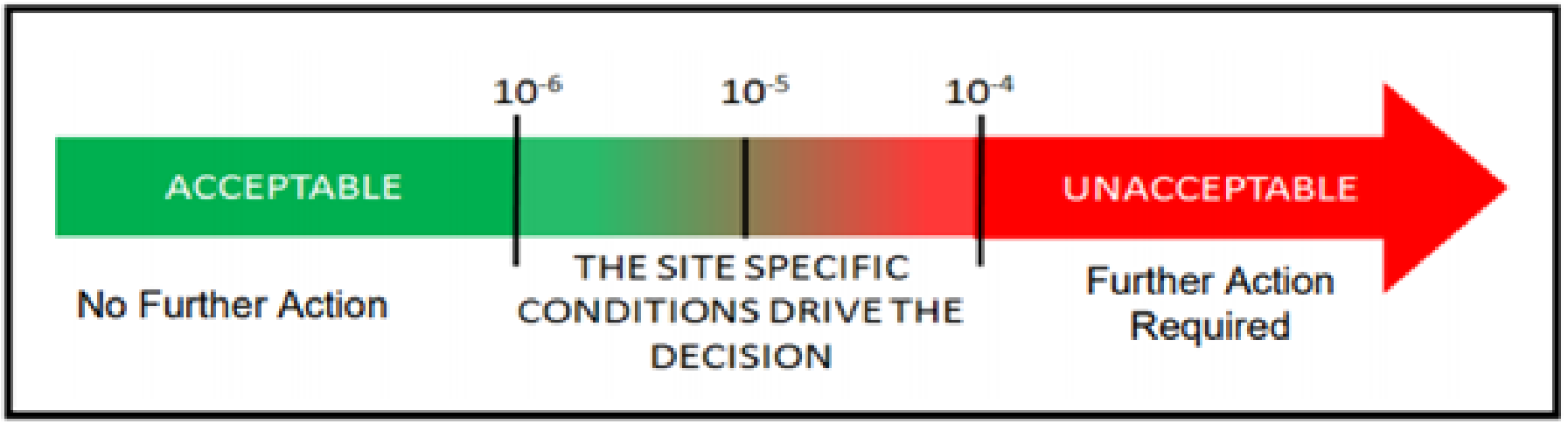
* Where the cumulative carcinogenic site risk to an individual based on reasonable maximum exposure for both current and future land use is less than 10(-4) and the non-carcinogenic hazard quotient is less than 1, action generally is not warranted unless there are adverse environmental impacts. However, if MCLs or non-zero MCLGs are exceeded, action generally is warranted.

* Other chemical-specific ARARs may also be used to determine whether a site warrants remediation.

- *Exposures to environmental chemicals resulting in risks within the **10-6 to 10-4 range** are generally considered by public health and environmental regulatory agencies to be "acceptable". State Water Control Board*

- *Under the Comprehensive Environmental Restoration, Compensation, and Liability Action (CERCLA), the acceptable risk range is defined as risk falling somewhere **between 1 additional cancer in 10,000 and 1 additional cancer in 1,000,000.** When the risk assessment indicates the total risk to an individual exceeds the 10-4 end of the risk range, action is generally warranted at the site. USACOE*

Risk Management Framework for Vapor Intrusion (VI)



DTSC, 2011

Example of the decision variability for long-term vapor intrusion management

Site	Former use	Planned use	Contaminant/max soil vapor concentration (ug/m^3)	Soil vapor clean-up goal (ug/m^3)	VIMS w/OMM?	Indoor Air required?
A	Light industrial	473 units	**PCE/16,000**	460	**Yes (and SVE)**	**Yes – then No**
B	Light industrial	162 units	**PCE/5,000**	460	**Some**	**No**
C	Orchards (off-site source)	206 units	**PCE/6,000**	460	**Some**	**No**
D	Commercial	164 units	**PCE/500**	460	**Some**	**No**
E	Residential/light industrial	100 units	**PCE/<100**	460	**No (barrier only)**	**No**
F	Oil field	175 units	**TPHg/2,900,000**	600,000	**Yes**	**Yes**

With the exception of Site A, the maximum concentrations are generally within "acceptable risk range". Is mitigation really warranted for sites like these?

HALEY ALDRICH

DOUBLE JEOPARDY: A CAUTIONARY TALE

Jeffrey A. Adams, PhD, PE
September 16, 2025

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Photo Source: APWA
https://apwa.partica.online/reporter/july-2025/inside-apwa/2025-public-works-projects-of-the-year

THE PROJECT…

- Rehabilitation of 1950s-era flood control system to protect future housing, the community college, and surrounding neighborhoods
- Green infrastructure approach – meander, vegetation, amenities, etc.
- Work access granted from adjacent community college property, including approx. 1.6 acres of encapsulated impacted material
- 25-acre mitigation area – agrichemical-impacted soil placed in 1 ¼-foot lift and capped with clean soil
- Approved RAW from mid-2000s
- Client notification in January 2020

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Photo Source: Alan Kropp and Associates
https://www.akropp.com/new-ohlone-creek-project-newark-california

THE PROJECT TIMELINE…

**Denotes new case officer and/or supervisor.*

- January 2020: Client contacts us
- *March 2020: Everyone go home! DTSC staff joins the COVID response
- *December 2020: Sampling completed; draft report submitted Jan 2021
- Late 2021: Draft ESD report submitted
- *Mid-2022: CEQA Exemption confirmed; regular ”minor” correspondence
- Fall 2022: “Deficiencies”(!!!)
- November 2022: Comments received; draft ESD and IDW re-submitted
- *January 2023: 13 pages of new comments - funding grant is in peril
- April 2023: Re-submitted drafts are approved
- July 17 to 20, 2023: Field work completed
- *November 2023: 3-page completion report is submitted
- *March 2025: Approval of completion report

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BY THE NUMBERS...

- CLIENT NOTIFICATION: January 2020
- REGULATORY APPROVAL FOR COMPLETION REPORT: March 2025

- 4: Case Officers (at least)
- 3: Supervisors (at least)
- 1: Pandemic
- 3: Pages of text in Completion Report
- 1.6: Acres of previously encapsulated material disturbed
- 3,400: Cubic yards of impacted material excavated and disposed at a landfill (project total 34,100 CYs)
- 4: Days of field work
- 1: APWA National Project of the Year Award!

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Photo Source: APWA
https://apwa.partica.online/reporter/july-2025/inside-apwa/2025-public-works-projects-of-the-year

THE CAUTIONARY TAKEAWAY…

- Existing approved RAW and mitigation in place
- CEQA-exempt project
- Like land use (expanding the width of a flood control system into vacant land)
- Over 5 years, start to finish
- Housing planned for other portions of site

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Photo Source: Ohlone College
https://www.ohlone.edu/sites/default/files/users/jtrinidad%40ohlone.edu/25b-studenthousingupdate0624.pdf

Breakout Groups

- **Does the Rising Tide Raise all Boats?** - stakeholder engagement is a key element of success for any brownfield redevelopment project. Can we structure meaningful stakeholder engagement that can help accelerate clean-up? Can buy-in from communities be an asset for redevelopment versus a check box?
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Breakout Questions

Please use the post-its to write up your ideas and place them on the flip chart around the room. Add your name so we can follow-up!

- Does this brownfield challenge sound familiar? Have you worked on a project like this?
- If you could change anything about the process of brownfield clean-up and redevelopment as it relates to this challenge, what would it be?
- At what point in the timeline of brownfield redevelopment would it make sense to target reform? What's the best place in the clean-up and development process for this intervention?
- What would be some pitfalls to avoid in reform around this topic?

Blue Sky!

Please use the post-its to write up your ideas and place them on the flip chart around the room. Add your name so we can follow-up!

- What would you change about our existing policies/practices to accelerate clean-up and encourage redevelopment?
- Is there a challenge you've encountered numerous times that you think would be good for a future brainstorm of solutions?

Transforming Land, Empowering Communities

Today, we've taken the **first steps to outlining this 10-year vision,** and we hope you'll stay engaged as we work out our incremental steps to achieve our shared goals of **vibrant, affordable, and healthy communities.**

Together, we can organize a coalition to advance reforms to safely accelerate clean-up and redevelopment.

Call to Action

- Share a case study/example project!
- Sign-up to stay informed about our advocacy efforts and opportunities to engage!
- Propose a solution, come find us at the conference!
- robyn@prosperitycalifornia.org

CALIFORNIA LAND RECYCLING CONFERENCE

Transforming Land, Empowering Communities

September 16-18, 2025 | Carson, CA

OFFICE OF BROWNFIELDS

CENTER FOR CREATIVE LAND RECYCLING

THANK YOU!

TOGETHER WE EMPOWER COMMUNITIES THROUGH THE TRANSFORMATION OF BROWNFIELDS

Join the conversation, use #CALRC2025 to share your photos, insights and highlights!

We appreciate your feedback, follow this QR code to submit an evaluation form on Whova.