

**Optimizing Brownfields Cleanups in
California:
An Open Exchange of Information and
Ideas**

**December 6, 2004
Sacramento, CA**

Cleanup Program Authorities

DTSC

Authorized by and implements the Carpenter-Presley-Tanner Hazardous Substance Account (“State Superfund”) Act

California Health and Safety Code, Chapter 6.8, 6.82 and 6.85

Addresses releases or threatened releases of hazardous substances.

Water Boards

Authorized by and implements the Porter-Cologne Water Quality Control (“Porter-Cologne”) Act.

California Water Code

Regulates discharges or threatened discharges of waste to waters that cause pollution or nuisance.

MISSION STATEMENTS

DTSC

The Department's mission is to restore, protect and enhance the environment, to ensure public health, environmental quality and economic vitality, by regulating hazardous waste, conducting and overseeing cleanups, and developing and promoting pollution prevention.

Water Board

The State Board's mission is to preserve, enhance and restore the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations.

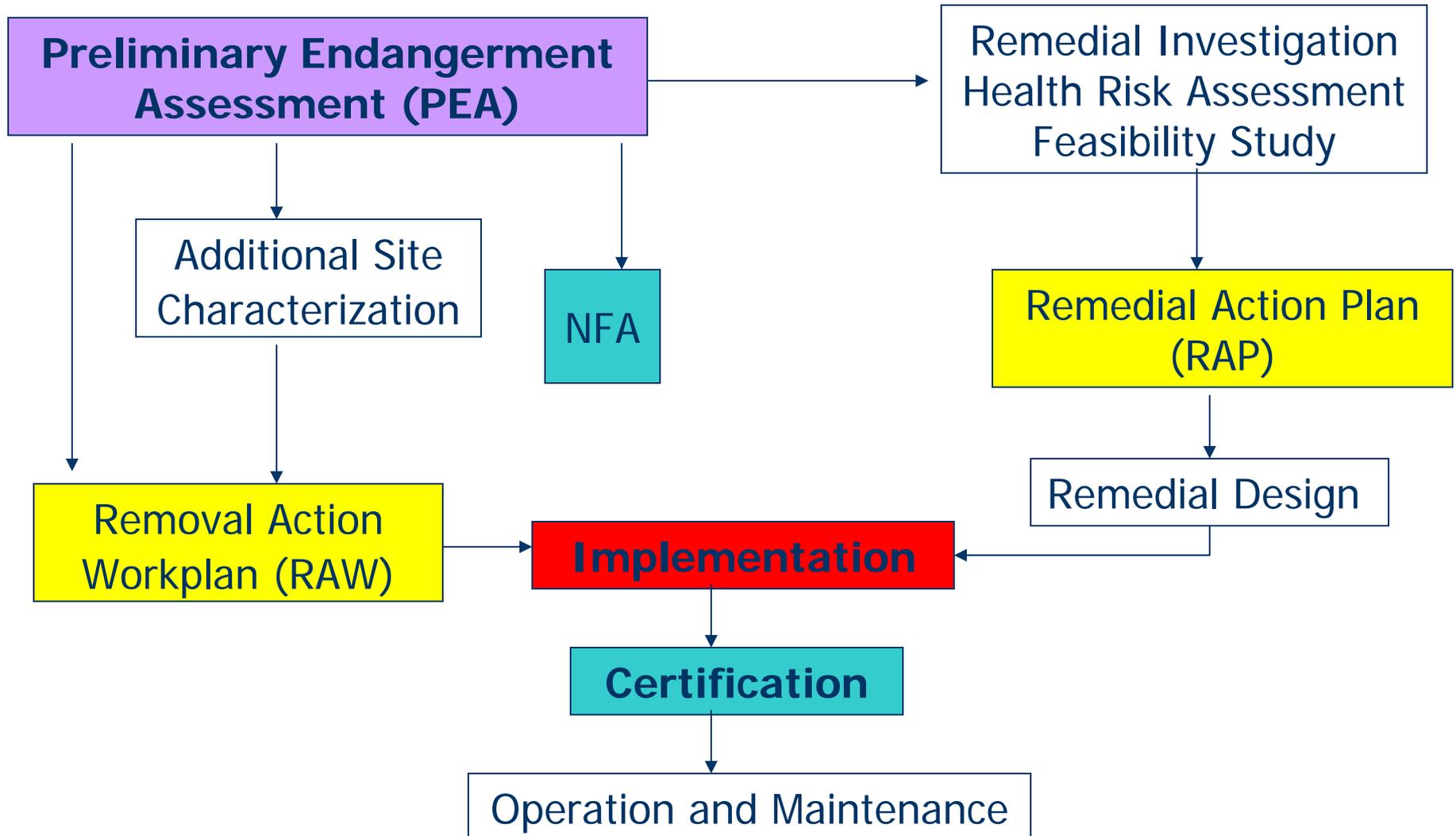
CLEANUP PROCESSES

All sites go through the same basic process:

- Identify the problem
- Determine nature and extent of release
- Evaluate potential risks to public health and the environment and threats to water quality posed by the release
- Set cleanup goals
- Select an appropriate remedy
- Implement the remedy

DTSC	DTSC/RDA	Water Board
Preliminary Endangerment Assessment	Site Characterization	Preliminary Site Assessment
Site Characterization or Remedial Investigation		Soil and Water Investigation
Risk Assessment Setting cleanup goals	Risk Evaluation Setting cleanup goals	Risk Assessment Setting cleanup goals
Feasibility Study/Remedy Selection (RAW/RAP)	Feasibility Study, Remedy Selection Document	Cleanup Plan
Design (may be combined with RAW)	Design (may be combined with remedy selection document)	
Implementation	Implementation	Implementation
Certification	Certification	Completion/NFA
Operation and Maintenance, if required	Operation and Maintenance, if required	Risk Management, if required

Overview of DTSC Site Mitigation Process:



DTSC's Public Participation Philosophy

- Involve the public early
- Listen to concerns
- Actively encourage public participation in our decision-making process.
- Establish a two-way dialogue
- Be sensitive to environmental justice issues
- Recognize that all members of the public have a stake in our decisions

Public Participation Activities

Assessment:

- Community Survey
- Community interviews
- Mailing List
- Information Repositories
- Community Profile
- Public Participation Plan

Inform/Involve:

- Fact Sheets
- Public Notices
- Workshops
- Advisory Groups
- Comment periods
- Public Meetings
- Response to comments

Public Participation (con't)

Redevelopment Agency/DTSC process:
Scoping meeting to assess combining, to the extent possible, public participation processes. Requires fact sheet(s), public notice(s), public meeting(s).

Water Board

Preliminary Site Assessment
Soil and Water Investigation (plus interim actions)
Risk Assessment Setting cleanup goals
Cleanup Plan
Implementation (incl. monitoring)
Completion / NFA Risk Management

Water Boards - Public Participation

- Tailor to community needs
- Water Board public hearings
 - 30-day public comment period for tentative orders
 - Public hearing followed by Board action
- Sites with community interest
 - Fact sheets
 - Community meetings
 - Public comment periods for key documents

Water Boards – Oversight Tools

- “Environmental” approach
- Screening levels
- Risk management
- Cleanup-complete determinations
- “Comfort” letters

“Environmental” Approach

- Consider all receptors and pathways
- Consider current and future uses
 - Land uses
 - Beneficial uses of water
- Focus remedial activities on key issues
- Protect human health and the environment

Screening Levels

- **Conservative assumptions**
- **Quickly determine site issues**
- **Brownfield benefits**

Examples

- USEPA (Region 9) - PRGs
- Cal/EPA – Draft CHHSLs
- SF Bay Water Board – ESLs

Risk Management

- Why needed
- When: during and after active cleanup
- Engineering controls
- Institutional controls
- Tracking/enforcement of controls

Cleanup-Complete Determinations

- “No active cleanup” letters
- Certificate of completion
- No further action (NFA)

“Comfort” Letters

- What - informal liability relief
- On-site letters – to buyers
- Off-site letters – to property owners
- Less important after AB 389?

Tools for Brownfields “Developers”

- Voluntary Cleanup Program (VCP, SLIC)
 - Voluntary participation
 - Uses existing cleanup processes
- Prospective Purchaser Agreement
 - Limit potential liability
- Assembly Bill 389
 - Limit potential liability

VCP, Prospective Purchaser Program Santanna Row

- Conversion of a low-density strip mall into a commercial and residential center
- Addressed soil containing pesticides and VOCs



VCP, Prospective Purchaser Program Santanna Row



SLIC

Hollywood Highland Development

- Redeveloped into the Kodak Theater (Academy Award), hotel, restaurants, retail and commercial.
- Fuel hydrocarbons and metals in soil
- VOCs in groundwater
- Soil excavation as part of construction
- Groundwater dewatering by MTA



Hollywood Kodak Theater

Prospective Purchaser Program Albertson's Supermarket

- 2-block area of downtown Hayward included a dry cleaner, gas station and bus terminal
- Chlorinated VOCs and petroleum in soil and groundwater addressed through source excavation and insitu-chemical oxidation with monitored natural attenuation.
- Site is now an Albertson's Supermarket with 7 other stores.



Tools for Redevelopment Agencies

- Voluntary Cleanup Program with Polanco Act
 - Polanco Act grants local redevelopment agencies statutory authority to require assessments and to cleanup, or compel the cleanup, of contaminated properties
 - Upon completion, limited immunities for RDAs, developers, future owners, financial institutions
- Environmental Oversight Agreement ***NEW***
 - Establishes a partnership between state environmental regulators and local governments in cleaning up contaminated sites
 - Provides opportunity for consultative services
 - Also uses the Polanco Act

Emeryville Redevelopment Agency



Emeryville

Marriott Hotel



Bay Street



Stockton Waterfront Project

VCA with City



- PEA completed
- Land use covenant recorded to preclude use of the site for sensitive uses.



Lead, PAHs, BTEX and MTBE were the chemicals of concern

Stockton Waterfront Project (con't)

Opening in June 2001, the Dean DeCarli Waterfront Square facilitates a vibrant street life, connecting the City's Central Business District with the emerging recreational waterfront district.



SLIC Cost Recovery Agreement with LA City Community Redevelopment Agency

- Former commercial and industrial property redeveloped into Staples Center
- Soil contaminated with fuel hydrocarbons, metals and VOCs. Fuel hydrocarbons impacted groundwater.
- Hot-spot excavation and soil vapor extraction
- Third party toxicologist review of health risk evaluation
- No Further Action issued



Staples Center

SLIC, Polanco

Cherrywood (Before)

- 44-acre area in San Leandro contaminated from past industrial uses.
 - USTs with petroleum contaminated groundwater
 - Improperly abandoned wells
 - VOCs from on and off-site sources
 - metals from a metal fabricating facility
- contamination addressed through source removal and insitu chemical oxidation



SLIC, Polanco

Cherrywood (After)



- TPH and VOC groundwater contamination remediated by the developer under **Polanco Act**
- Redeveloped into 354 homes.
- Infill development close to a BART station reduces sprawl.

Tools for Property Owners

- Voluntary Cleanup Program (VCP, SLIC)
- Expedited Remedial Action Program
 - Voluntary alternative to NCP process
- CLEAN Program
 - Low interest loans to fund site assessment or cleanup
- Site Designation Process
 - Establishes single lead agency
- Unilateral or Consent Order (IS&E, CAO)
 - Clarify responsible parties and tasks

SLIC

Univar USA Inc. Site



- 15 acres site, formerly a chemical factory and blighted warehouses replaced with a new multi-use stadium facility
- PCE, TCE, cis-1,2-DCE and trans-1,2-DCE in soil and groundwater

SLIC Univar USA Inc. Site



Groundwater treatment system incorporated into the design of the stadium and installed during stadium construction

Site Designation, Prospective Purchaser Agreement Mission Bay – San Francisco



- 303-acre redevelopment project
- RWQCB designated administering agency



Site Designation, Prospective Purchaser Agreement Mission Bay – San Francisco



Residential
developments

Part of UCSF
Research Campus

CLEAN Loan, Prospective Purchaser Agreement East Bay Habitat for Humanity

Former nursery and truck
wrecking yard

Removed approximately
2,800 tons of soil
containing lead, PCBs
and/or PAHs.

Site was cleaned up to
unrestricted use standards.



CLEAN Loan, Prospective Purchaser Agreement East Bay Habitat

Anticipate constructing up to 26 homes on this 1.92 acre parcel in 2005, similar to those constructed by East Bay Habitat in a nearby neighborhood.



Expedited Remedial Action Program River Street Redevelopment Site

Currently removing approximately 17,000 cubic yards of soil containing lead, PAHs, petroleum from this 1.5 acre Site.

42% orphan share



Expedited Remedial Action Program

River Street Redevelopment Site

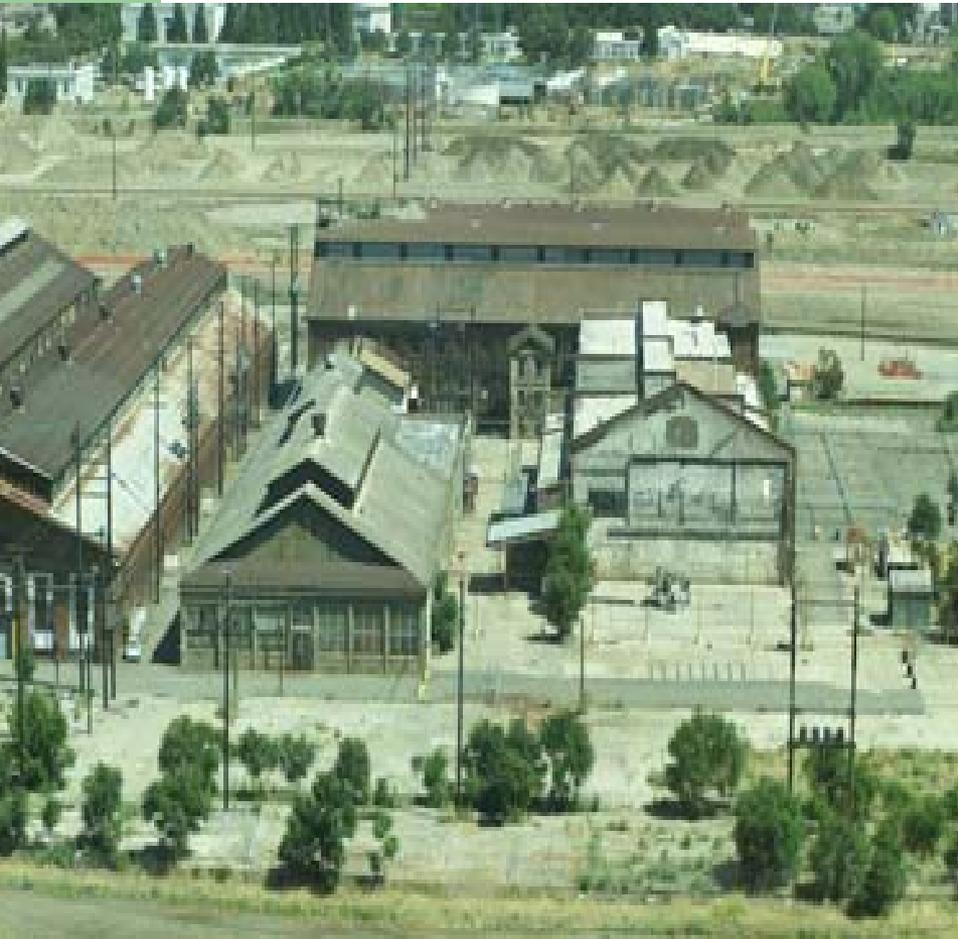


Proposed multi-family residential redevelopment

Subterranean parking garage will underlie most of development

Soil cleaned up to multifamily residential standards. Groundwater will be treated with ORC with continued monitoring

Enforceable Agreement Southern Pacific Rail Yard-Sacramento



- 240 acre locomotive maintenance yard for more than a century.
- Soil impacted by metals, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs) and petroleum.
- Groundwater impacted by metals, chlorinated VOCs and petroleum.

Enforceable Agreement Southern Pacific Rail Yard-Sacramento



Current



One artist's rendition of future use

Tools for Local Agency Oversight

- Senate Bill 1248 (effective 1/1/1996)
 - Oversight of cleanup provided by local environmental health officer
- Senate Bill 32
 - Allows for local agency cleanup oversight
- CUPA and Delegated authority from RWQCB
- Site Designation Committee
 - Local agency designation under limited circumstances

Private Site Manager Program

- Created to allow third-parties to oversee characterization and cleanup of low risk sites.
- To date, no one has used this program.

For More Information

DTSC's One Page Summaries

DTSC's website: www.dtsc.ca.gov.

Water Board Fact Sheets

SWRCB website: www.waterboards.ca.gov