

UPC - BAYLANDS PROJECT UPDATE ON ENVIRONMENTAL CONDITIONS

May 2017

Our Capabilities and Resources

- More than 1,100 scientists, engineers, and project support staff
- > 80% of our technical staff hold advanced degrees
- 60+ North American offices
- 15+ International offices (Malaysia, United Kingdom, Australia)

- Complex site characterization and assessment
- Innovative in situ soil/groundwater remediation
- Sediment characterization and remediation
- Vapor intrusion assessment and mitigation
- Closure of landfills/waste management units/ponds/pits
- Construction management/quality assurance
- Stormwater management

- History
- Remediation Status
- Landfill Closure Status

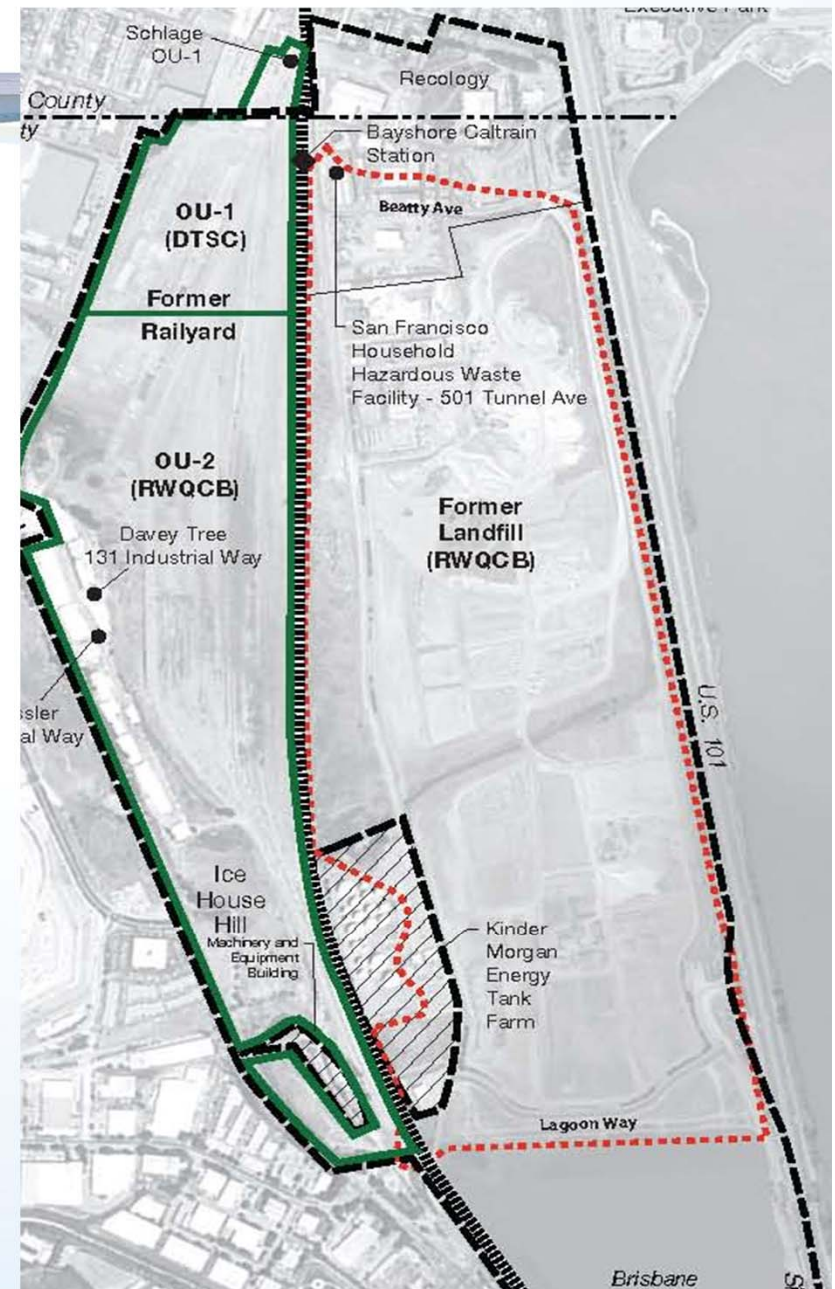


- SPRR Railyard – SP placed fill over the site between 1896 and 1914. Performed locomotive maintenance from 1914 to 1960
- Operable Units 1 and 2
- Cleanup to be conducted under oversight of California Department of Toxic Substances Control (DTSC) (OU-1) and California Regional Water Quality Control Board, San Francisco Bay Region (Water Board) (OU-2), both authorized under CA Health & Safety Code to direct cleanups

- Former Landfill - The landfill operated between 1932 and 1967, and was used for the disposal of solid wastes composed principally of domestic, industrial and shipyard waste, sewage, and rubble. No waste has been disposed of at the Brisbane Landfill since 1967.
- Closure and redevelopment of landfill overseen by Water Board, authorized under CA Health & Safety Code to direct landfill closures

Environmental Areas – Overall Status

- **Former Railyard**
 - Many investigations conducted over the years provide good basis for understanding conditions
 - Data Gap Analysis will be performed as part of remedy and development
- **Former Landfill**
 - Monitoring of groundwater, leachate, and landfill gas has been conducted for many years
 - Results consistent with most municipal landfills

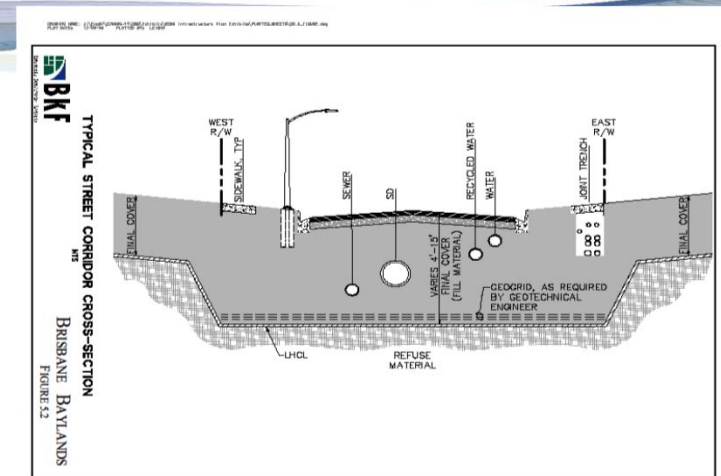


- **Contaminants**
 - Chlorinated solvents in groundwater from Schlage Lock Site
 - Metals in soil
- **Likely Remediation Elements**
 - Active groundwater cleanup underway as part of Schlage OU under DTSC
 - Update RI/FS for metals in soil
 - Prepare RAP for public review and comment
 - Active soil cleanup where necessary
 - Long-term monitoring
 - Engineering controls, where appropriate
 - Land use controls
 - Clean utility corridors
- **Implementation**
 - Active groundwater cleanup completed Feb 2011
 - Long-term groundwater monitoring underway
- **Upon Completion of Remediation**
 - O&M Plan – O&M Agreement – Financial Assurance

- **Contaminants**
 - Metals in soil
 - Chlorinated solvents in soil and groundwater
 - Petroleum in soil and groundwater
- **Likely Remediation Elements**
 - Active soil and groundwater cleanup where necessary
 - Update RI/FS
 - Prepare RAP for public review and comment
 - Engineering controls, where appropriate
 - Long-term monitoring
 - Land use controls
 - Clean utility corridors
- **Implementation**
 - Not yet completed
- **Upon Completion of Remediation**
 - O&M Plan – O&M Agreement – Financial Assurance

- Contaminants
 - Landfill gas
 - Landfill leachate

- Title 27 Closure Requirements
 - adoption of Closure WDRs by the Water Board prior to landfill development;
 - approval of the landfill Final Closure and Postclosure Plans by the regulatory agencies, including the CRWQCB, CalRecycle/San Mateo County Department of Health Services and City of Brisbane;
 - continued monitoring of landfill settlement;
 - operation and maintenance of the existing LSCTS, as needed;
 - operation and maintenance of the landfill GCCS, as needed;
 - continued groundwater, surface-water and leachate quality monitoring and evaluation;



Closure Status – Landfill

- installation of the final cover system over the entire landfill, including the IDC, Guadalupe Lagoon shoreline and measures to control and monitor migration of LFG;
- installation and monitoring of the LFG perimeter monitoring stations;
- implementation of wetland mitigation measures;
- final cover postclosure maintenance, including cover inspections; and
- land use controls, including deed restrictions that limit site uses.