## PATH TO CLOSURE SUBGROUP

#### POLL

# What are the biggest barriers you see to closing vapor intrusion sites?

#### PATH TO CLOSURE

- Surveyed DTSC and Water Board case managers for vapor intrusion projects that have closed recently
- Identified 3 general categories of VI endpoints
  - Clean closure
  - VIMS and long-term monitoring
  - Low or no VI risk, but Site open for other reasons (groundwater, etc.)
- Found potential case studies that can be used in future workshops and trainings that exhibit different aspects of successful closures
- Recognized common themes for sites that achieved these endpoints

### FLAVORS OF VI ENDPOINTS



- No Further Action Unrestricted land use and unlimited exposure.
- Low Threat Closure Water Board may close the case if contaminants are unlikely to pose an unacceptable threat.
- Media Specific Closure Water Board may provide no further action for soil only
- Certified Remedy with Land Use Control DTSC will do annual inspections and Five-Year Reviews.
- Remedy Construction Complete DTSC may state that remedy is constructed and operating as designed with long term operation and maintenance.
- Suitable to Occupy Cleanup and mitigation are functioning such that proposed occupants
  of the property will not be exposed to unacceptable risks.

#### COMMON THEMES OF VI SUCCESS

- Robust conceptual site model supported by adequate site-specific data
- Subsurface contaminant concentrations are:
  - Stable to decreasing
  - Low
  - Do not suggest an ongoing on-Site source or groundwater contamination
- Source areas addressed
- Indoor air test results below screening levels
- Long-term stewardship may be required





- Scoping meetings
- Involve us early & often
- Be clear about deadlines & needs
- Address all comments & requests



**Seal of Approval** 

#### VI SUCCESS STORY

#### Site in Bay Area

- Vacant lot
- Formerly light industrial
- No history of PCE use
- Adjacent to property with open cleanup case with PCE contamination
- PCE above screening level in one probe
- Consultant proposed alternate attenuation factor

- No on-site sources and adjacent sources are remediated
- PCE is fully delineated laterally and vertically
- Sufficient spatial/temporal vapor data to show stability
- Developer's construction plans includes multiple VIMS components
- Groundwater is characterized and clean
- Developer agreed to a period of monitoring
- Agency agreed to accept alternate attenuation factor