CA Regional Water Quality Control Board San Diego Region

CONVAIR LAGOON REMEDIATION OF PCBs

JUNE 18, 2002 WORKSHOP Craig L. Carlisle, Senior Engineering Geologist





SETTING

- ♦ 10 ACRE EMBAYMENT
- SEVERAL DRAINS AND OUTFALLS
- ADJACENT TO GENERAL DYNAMICS, TELEDYNE, & AIRPORT



HISTORY

- 1979 to 1985 State Mussel Watch Program identified PCBs
- In 1986 RWQCB issued Cleanup and Abatement Order No. 86-92
- Teledyne Ryan conducted several phases of investigation



CONTAM INATION

- PCB concentrations up to 1800 mg/kg
- PCBs from surface to 10 feet deep
- Approximately 7 acres of SD Bay bottom had PCBs greater than 4 mg/kg



REM EDIAL ALTERNATIVES

DREDGING

- **ι off-site disposal**
- **near-shore containment**
- CAPPING



EVALUATION OF ALTERNATIVES -Considerations

- Water quality
- Biological
- Marine traffic
- Human health and safety
- Cost



CAP DESIGN CONSIDERATIONS

- Effectiveness (isolation)
- Stability (wave action, currents, bioturbation)
- Decrease in water depth
- Constructability (materials, techniques)







CROSS SECTION OF CAP





CAP DETAILS





POST-CAPPING MONITORING

- RWQCB issued WDRs
- Visual inspection of eelgrass
- Sample cap at three depths
- Sample sediment in storm drains



MONITORING RESULTS

- Eelgrass is well established
- Cap thickness maintained
- No evidence of leakage
- PCBs found on top of cap and in storm drain



CURRENT STATUS

- Continued monitoring of cap
- Investigation of storm drains as source of "new" PCBs



QUESTIONS ?



