

2011 Annual EPA Region 9 Conference

BIA Campus Lead-Based-Paint (LBP) Soil Remediation Project
Hoopa Valley Indian Reservation

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Source of Funding for LBP Project

- 2001 – Conducted preliminary investigation of 300 homes/facilities (pre 1978) using a \$10,000 Department of Housing & Urban Development (HUD) grant.
- 2005 – Bureau of Indian Affairs (BIA) provided \$29,700 to conduct baseline assessment of former BIA Campus structures.
- 2007 – BIA provided \$4,270 to conduct Phase I Assessment of sites that exhibited high concentrations for LBP.
- 2008 – BIA transferred \$14,000 for remediation cost of sites.
- 2010 – BIA provided \$12,500 to transfer contaminated soil to remediation facility.
- Total Federal contribution: - **\$40,770**

Historical Background of BIA Campus

- (1864 -1900) - U.S. Army occupation - Fort Gaston

Forest Officer in Charge.



The Agency---Hoopa.

Historical Background cont.

- (1900 -1986) BIA occupied campus for Trust Resource Management.
- (1986 – present) Hoopa Tribe took over campus under Self- Gov. (638)



0.1 0 0.1 0.2 Miles



LBP Assessment of BIA Campus

- Determine presence/absence of LBP within the interior & exterior of 44 campus structures.
- Purchased mobile x-ray fluorescence (XRF) analyzer- \$18,000
- Conducted outreach – informing campus residents of LBP health risks.



Phase I Assessment

- Of the 44 dwellings tested, 3 sites confirmed positive for LBP contamination.
- Laboratory soil test results revealed significant health risk at these sites – exceeding 400 ppm.
- EPA regulations define a “soil-lead hazard as exceeding 400 ppm (40 Code of Federal Regulation Part 745.65 – ” *Lead-based -paint hazard*”).
- Maximum concentration level (LBP) – *Superintendent’s House* – 1,700 ppm
- Source of LBP soil contamination resulted from deterioration of exterior paint and past renovations.



Remediation of Contaminated Sites

- Removed soil from around perimeter of dwellings;
 - Retested excavated area
 - Refilled excavated area with new soil & replanted vegetation
- 16 cubic of LBP soil removed to off-site storage area
- BIA requested soil removed from each of 3 sites be tested

Transfer of LBP Soil to Remediation Facility

- Requirements for removal LBP soil to certified remediation facility:
 - RCRA ID # - generator of hazardous waste
 - California facilities require (Soil Test) –
 - TTLC – Total Threshold Limit Concentration
 - TCLP - Toxicity Characteristic Leaching Procedure
- Hire certified hazardous waste hauler
- Tribe provided a letter to BIA – *Release of Liability*
- Project Observations:
 - Once BIA took responsibility for liability, very receptive in providing technical & financial assistance.
 - Transfer of funds from BIA to Tribal coffers was a very slow process – end-of-year \$.