

DAN NAPIER, CIH INDUSTRIAL HYGIENE

LICENSE #773462

111 N. Sepulveda Boulevard, Suite 355
Manhattan Beach, California 90266-6850
Telephone 310/800 644-1924
Fax 310/937-8642
www.cihcsp.com
Email dan@cihcsp.com

August 6, 2012

Report on Aerially Deposited Lead in Soils Dan Napier, CIH CP 2267

This report is a meta study of air monitoring conducted during excavation works at various locations throughout California. The air monitoring data was collected at various locations throughout California. All tests were conducted while operating during excavation work on soils that were contaminated with aerially deposited lead. Air Monitoring was conducted in compliance with OSHA and NIOSH Standards. All data was collected during operations using standard dust control methods. A water truck was utilized to keep dust controlled. This data includes locations throughout the State of California the dates are indicated on the table, as well as the general location. In all cases the levels were below the detection limit for the NIOSH Method 7082 Issue 2. The level of detection (LOD) for NIOSH Method 7082 Issue 2 is 2.6 μ g. The maximum air volume permitted by the method is 1500 liters of air. The minimum air volume is 200 liters and provides a LOD of 50 μ g/m³.

Date	Location	Lead level µg/m³
7APR04	State Route 60 @ Heacock, Four points loader operator, grade checker, upwind @ downwind	Below Detection <2µg/m³
1APR07	State Route 23 @ kp 9.8 Five points three employee points loader operator, grade checker & water truck operator/driver, up wind and down wind	Below Detection <2µg/m³
25OCT07	Route I 5 sb 912+00 TO 907+15. Three points, loader operator, upwind and downwind	Below Detection <2µg/m³
22JUL08	State Route 101 near Salinas Avenue Four points loader operator, grade checker, upwind @ downwind	Below Detection <2µg/m³
27MAY09	Lewis Road, Camerillo Four points loader operator, grade	Below

	checker, tractor operator and excavator operator. Method 7105, Issue 2 was utilized for this work.	Detection <0.05µg/m³
10AUG09	State Route 78 at Rancho Santa Fe, loader operator, grade checker, up wind.	Below Detection <2µg/m³
28NOV11	State Route 14, @ I Street Four points loader operator, grade checker, upwind @ downwind.	Below Detection <2µg/m³

All levels measured were conducted by a Certified Industrial Hygienist (CIH), the data clearly demonstrates that excavation of ADL can not and does not create an exposure above the 30 $\mu\text{g/m}^3$ action level. The only event that could possibly trigger an exposure approaching the Action Level (AL) or Permissible Exposure Limits (PEL) would be accompanied with a dense dust cloud that persisted all day long. The presence of visible dust is regulated by the local air quality districts, and the presence of visible dust is regulated by both State and Federal code. The proper use of dust control by the application of water does not create measurable levels using NIOSH Method 7082 Issue 2. The detection level is (2 μ g Pb). Improper use, failure to use water to control dust could create a low level of exposure, but it is readily discernable since it is accompanied by a dense dust cloud. Documentation of lead levels in significantly dense dust clouds has not been published or known to this author.

Respectfully Submitted;

Dan Napier, MS

Certified Industrial Hygienist