

EVALUATION OF ARSENIC AS A CHEMICAL OF POTENTIAL CONCERN AT PROPOSED SCHOOL SITES IN THE LOS ANGELES AREA.

William S. Bosan, PhD., Gerald (Buzz) Chernoff, Ph.D., John Christopher, Ph.D., Manita Rawat, and Deborah Oudiz, Ph.D. Human and Ecological Risk Division, Department of Toxic Substances Control, Sacramento, CA.

Metals are naturally occurring in soil, and as such, can prove problematic when identifying chemicals of potential concern (COPC) for risk assessment purposes. Arsenic is one of the more contentious metals because the concentration at which it poses an unacceptable risk is often well below background and ambient levels typically encountered. DTSC/HERD used the combined arsenic data from 19 sites (1097 individual sample locations) to establish a regional, ambient arsenic range for the Los Angeles area. The upper limit of the arsenic ambient range, 11.3 mg/kg, was defined as the 95% Upper Confidence Limit of the 99th Percentile Concentration ($UL_{0.95}(X_{0.99})$). The application of this value is demonstrated by the following decision logic diagram and example case studies.