

Bioaccumulation of chromium and its effects on reproduction in *Neanthes Arenaceodentata* (Polychaeta)

Philip S. Oshida, Lucinda S. Word

¹*Southern California Coastal Water Research Project, Long Beach, CA*

ABSTRACT

The levels of hexavalent chromium (Cr VI) that caused diminished reproductive ability in the polychaete *Neanthes arenaceodentata* were determined. Changes in numbers of offspring and time to spawning caused by Cr VI at 1 to 38 ug/litre during two generations of exposure (309 days) were measured. Time to spawning was unaffected but it was found that reductions in numbers of offspring occurred at 16 to 38 ug/litre. Bioaccumulation of chromium was also measured and found to be proportional to exposure levels; however, a direct relationship between tissue concentration and reduced numbers of offspring could not be established.

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