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**TEMPORAL TRENDS OF TRICLOSAN IN SEDIMENT CORES COLLECTED FROM TWO URBANIZED ESTUARIES.** Mark Cantwell (cantwell.mark@epa.gov), USEPA Atlantic Ecology Division, Narragansett, RI; B. Wilson, J. Zhu, University of Massachusetts, Boston; and J. King, Graduate School of Oceanography, University of Rhode Island.

Triclosan (5-chloro-2-(2,4-dichlorophenoxy)-phenol) is a antimicrobial agent present in a wide array of consumer based goods such as soaps, skin creams and dental care products. It has also been incorporated into consumer textiles and plastics due to its effectiveness as a biocide in solid materials. Triclosan is only partially removed by most wastewater treatment processes, with the remainder being released to receiving waters via effluent discharge. With a Log *K<sub>ow</sub>* of 5.4, there is potential for Triclosan to sorb to particles and accumulate in sediments. Current research indicates that Triclosan may pose significant risk to a wide range of aquatic organisms. In this study triclosan was measured in dated sediment cores collected from several urbanized estuaries in order to reconstruct temporal trends of accumulation. Measurable concentrations of Triclosan first appeared in dated sediments from the mid 1960s, the start of commercial production in the US. At one coring location, concentrations increased from 6 to 86 ng/g over the length of the core, demonstrating increased sediment accumulation rates from the 1960s to the present. At another site, concentrations climbed to as high as 400 ug/kg at depths corresponding to the 1980s before dropping to approximately 60 ng/g. Work is continuing to better understand the long-term behavior and fate of Triclosan in estuaries.