

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

September 12, 2006

SUBJECT: Development of PCB and Lead Sediment Clean Up Levels, Draft Action Memorandum; Peck Iron and Metal Site; Portsmouth, Virginia

FROM: Bruce R. Pluta, Coordinator
Biological Technical Assistance Group

TO: Richard Rupert (3HS31)
Eastern Response Branch

The following information is provided in response to your request to provide recommendations for clean up levels for PCBs and lead in marine sediments. We appreciate this opportunity to provide input during the development of the Action Memo.

For marine sediment, the probable effects level (PEL) for PCBs is 189 ppb. The PEL is based on observed toxicity to marine organisms in laboratory toxicity tests. This value is generally consistent with site-specific, risk-based preliminary remedial goals (PRGs) that have been developed to be protective of bioaccumulation based food chain exposure pathways as part of ecological risk assessments. For example, the sediment PRG for PCBs at Langley Air Force Base is 260 ppb which is estimated to result in acceptable tissue concentrations in fish.

At many sites, the PCB sediment clean up level to protect human health and the environment is established at 1 ppm. This value is reflective of considerations of other factors including costs and engineering feasibility. Based on this information and given the ecological setting in the area, the BTAG recommends that a clean up level of 1 ppm be targeted for the Peck Site.

For lead, we recommend consideration of a clean up range of 112 ppm (the PEL) to 450 ppm (the lowest apparent effects threshold (AET) concentration). For a single clean up value applicable to most habitats, the BTAG recommends 400 ppm which is within the recommended clean up range and consistent with human health values.

If you have any questions, please contact me at x 4-2380.