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

Dr. Richard Eskin, Ph.D., Director
Technical and Regulatory Services Administration
Maryland Department of the Environment
1800 Washington Boulevard, Suite 450
Baltimore, MD 21230

JUN 6 2006

Dear Dr. Rich Eskin:

The U.S. Environmental Protection Agency (EPA) Region III has reviewed the report, "Water Quality Analysis of Cadmium, Chromium, Copper, and Lead in the Potomac River Middle Tidal, Charles County, Maryland," which was submitted by the Maryland Department of the Environment (MDE) for final Agency review on April 5, 2006.

EPA agrees with MDE's determination that the recent data show that Total Maximum Daily Loads (TMDLs) for cadmium, chromium, copper and lead are not necessary for the Potomac River Middle Tidal. The Potomac River Middle Tidal (basin code 02-14-01-02) was first listed by Maryland on its 1996 Section 303(d) list of water-quality limited segments as impaired by nutrients, suspended sediments, cadmium, chromium, copper, and lead. Stream impairments from PCBs and to biological communities were later identified as 2002 and 2004 listings, respectively. All impairments were listed for the tidal waters except for impacts to biological communities, which are listed for the non-tidal region. The water quality analysis addresses cadmium, chromium, copper, and lead only. The listings for nutrients, suspended sediments, PCBs, and impacts to biological communities will be addressed separately at a future date.

Water quality data collected on April 13, 2004 at seven monitoring stations in the Potomac River Middle Tidal basin demonstrated that cadmium, chromium, copper, and lead concentrations consistently remained below respective water quality criteria adjusted for hardness. Table 4 of the report shows that, with hardness samples ranging from 36.68 mg/L to 42.41 mg/L, the observed concentrations for all four parameters were well below their respective freshwater hardness-adjusted chronic criteria (chronic criteria being the more stringent of numeric water quality criteria for each metal). Furthermore, results from surficial sediment samples collected and used for bioassay toxicity tests demonstrated no impacts on amphipod survival growth rate, indicating that sediment toxicity does not exist. If future evidence suggests that metals from the basin are contributing to downstream water quality problems, then MDE will need to reevaluate whether additional pollution controls in the Potomac River Middle Tidal watershed are necessary.

If you have any questions or comments regarding these reports, please contact Mr. Thomas Henry, TMDL Program Manager, at (215) 814-5752.

Sincerely,

Jon M. Capacasa, Director
Water Protection Division

cc: Melissa Chatham, MDE-TARSA