



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

Richard Eskin, Ph.D.
Director, Technical and Regulatory Services Administration
Maryland Department of the Environment
1800 Washington Blvd., Suite 540
Baltimore, Maryland 21230-1718

FEB 20 2009

Dear Dr. Eskin:

The U.S. Environmental Protection Agency (EPA), Region III, has reviewed the report "Water Quality Analysis of Zinc and Lead in Bodkin Creek, Anne Arundel County, Maryland," which was submitted by the Maryland Department of the Environment (MDE) for final review on July 24, 2008.

EPA agrees with MDE that current data show that zinc and lead Total Maximum Daily Loads (TMDLs) are not necessary for Bodkin Creek. Bodkin Creek was listed by Maryland on its 1996 Section 303(d) Lists as impaired by nutrients, suspended sediments, copper, zinc and lead. In 2004, the Creek was also placed on the Section 303(d) List as impaired for impacts to biological communities.

The monitoring data collected demonstrated that zinc and lead concentrations consistently remained below each pollutant's respective water quality criterion. Zinc concentrations ranged from Zn = 0.99 to 9.84 $\mu\text{g/L}$, and lead concentrations ranged from Pb = 0.01 to 0.94 $\mu\text{g/L}$. For all samples, hardness ranged from 475 mg/L to 1451 mg/L. Each pollutant's concentration range was well below the associated fresh water aquatic life chronic Hardness Adjusted Criteria (HAC), and did not exceed their respective salt water criteria in any of the samples. Furthermore, sediment samples used for toxicity tests show that it is unlikely that zinc and lead impact survival and reproduction.

Thank you for the opportunity to review the Water Quality Analysis. If you should have any questions, please contact Ms. Helene Drago, TMDL Program Manager, at 215-814-5796.

Sincerely,

A handwritten signature in black ink, appearing to read "Jon M. Capacasa".

Jon M. Capacasa, Director
Water Protection Division

cc: Melissa Chatham, MDE-TARSA