



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

JUL 13 2009

Dear Dr. Eskin:

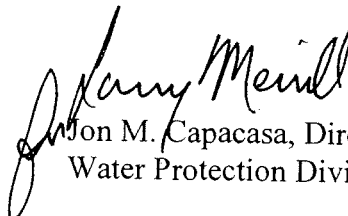
The U.S. Environmental Protection Agency (EPA), Region III, has reviewed the report "Water Quality Analysis of Cadmium in Little Patuxent River, Howard County, Maryland," which was submitted by the Maryland Department of the Environment (MDE) for final review on July 24, 2008.

EPA agrees with MDE that current data shows that a cadmium Total Maximum Daily Load (TMDL) is not necessary for Little Patuxent River. Little Patuxent River was listed by Maryland on its Section 303(d) list as impaired by cadmium (1996), nutrients (1996), sediments (1996), and impacts to biological communities (2002).

The monitoring data collected demonstrated that cadmium concentrations consistently remained below its water quality criterion. Cadmium concentrations ranged from 0.12  $\mu\text{g/L}$  to non-detected levels. For all samples, hardness ranged from 66 mg/L to 168 mg/L. Cadmium concentrations were well below the associated freshwater aquatic life chronic Hardness Adjusted Criteria (HAC). However, EPA notes the ambient sediment bioassay conducted that showed toxicity in two of the 13 monitoring stations. While cadmium levels are not responsible for the sediment toxicity, the issue of sediment toxicity still remains, and thus EPA agrees that the State should list the segment for aquatic life use impairments due to sediment toxicity on the Section 303(d) list. EPA looks forward to reviewing the results of the studies you are proposing to identify the contaminants responsible for causing the observed sediment toxicity.

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,

  
John M. Capacasa, Director  
Water Protection Division

cc: Melissa Chatham, MDE-TARSA