

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III

1650 Arch Street Philadelphia, Pennsylvania 19103-2029 8/20/2009

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

Dear Dr. Eskin:

The U.S. Environmental Protection Agency (EPA), Region III, has reviewed the report "Water Quality Analysis of Cadmium in Lower Susquehanna River, Cecil and Harford County, Maryland", which was submitted by the Maryland Department of the Environment (MDE) for final review on July 25, 2008. Also, based on EPA's comments, MDE sent a final revised report via electronic mail on August 7, 2009.

EPA agrees with MDE that current data show that a cadmium Total Maximum Daily Load (TMDL) is not necessary for Lower Susquehanna River. Lower Susquehanna River was listed by Maryland on its Section 303(d) list as impaired by cadmium (1996), suspended sediments (1996), nutrients (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 $0.08~\mu g/L$ to non-detected levels. For all samples, hardness ranged from 48.6~mg/L to 111~mg/L. Cadmium concentrations were well below the associated freshwater aquatic life chronic Hardness Adjusted Criteria. Furthermore, bottom sediment samples used for bioassay toxicity tests showed that there is no toxicity in the sediment as a result of cadmium.

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,

/S/

Jon M. Capacasa, Director Water Protection Division

cc: Melissa Chatham, MDE-TARSA