



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029
1/11/2006

Dr. Richard Eskin, Ph.D., Director
Technical and Regulatory Services Administration
Maryland Department of the Environment
1800 Washington Boulevard, Suite 540
Baltimore, MD 21230

Dear Dr. Eskin:

The U. S. Environmental Protection Agency (EPA) Region III has reviewed the draft final report entitled, "Water Quality Analysis of Eutrophication for the Tidal Lower Susquehanna River, Harford and Cecil Counties, Maryland", submitted by the Maryland Department of the Environment (MDE) on June 26, 2005.

EPA concurs with MDE's determination that recently available data show that a nutrient total maximum daily load (TMDL) is not required for the Tidal Lower Susquehanna River based on EPA's 1997 Section 305(b) guidance and MDE's application of the 10% exceedence rule (10% rule). However, EPA expects that the application of the 10% rule will most likely be phased out in 2006 or 2008 and the nutrient impairment would then be re-assessed using the new Chesapeake Bay assessment methodology (approved by EPA in September 2005) and additional monitoring data within the Lower Susquehanna River watershed. The tidal portion of Lower Susquehanna River was listed by Maryland on its 1996 Section 303(d) list of water quality-limited segments as impaired by nutrients, sediments and cadmium. The sediments and cadmium impairments will be addressed at a future date.

The monitoring data collected show that the dissolved oxygen (DO) criterion and designated uses are being met for the tidal portion of the Lower Susquehanna River in Maryland. The data show that excessive algal growth does not exist in the listed water as indicated by low chlorophyll-*a*. The surface DO concentrations do not violate the DO criterion of 5 mg/L because the occurrences of low DO are infrequent (< 3% of the samples are below the standard). Supporting data from 1998 to 2002 for nutrients and chlorophyll-*a* show total phosphorus concentrations ranging from 0.012 mg/L to 0.17 mg/L, total nitrogen ranging from 0.75 mg/L to 2.70 mg/L, and chlorophyll-*a* concentrations below (< 23 µg/L). If future evidence suggests that nutrients from the tidal portion of the Lower Susquehanna River Watershed are contributing to water quality problems, then action will have to be taken.



If you have any questions or comments concerning this letter, please contact me or Mr. Thomas Henry at (215) 814-5752.

Sincerely,

Signed

Jon M. Capacasa, Director
Water Protection Division

Enclosure

cc: Melissa Chatham, MDE-TARSA

