



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

8/16/2006

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

Dear Dr. Eskin:

The U.S. Environmental Protection Agency (EPA) Region III has reviewed the report, "Water Quality Analysis of Cyanide in Wills Creek, Allegany and Garrett Counties, Maryland," which was submitted by the Maryland Department of the Environment (MDE) for final Agency review on July 20, 2006.

EPA agrees with MDE's determination that the recent data show that a cyanide Total Maximum Daily Load (TMDL) is not necessary for Wills Creek. Wills Creek (basin code 02-14-10-03) was first listed by Maryland on its 1996 Section 303(d) list of water-quality limited segments as impaired by cyanide, sediments, and nutrients. The 1998 listing included low pH impairments. Fecal coliform and evidence of biological impacts were added in 2002. This water quality analysis addresses only the cyanide impairment. The listings for sediments, nutrients, fecal coliform and impacts to biological communities will be addressed separately at a future date. A WQA for low pH was submitted and approved in 2005.

The water column data collected in October 2004 and May 2005 at nine monitoring stations shows that concentrations of cyanide in the water column do not exceed water quality criteria. Cyanide concentrations in all samples were below the method detection limit of 0.01 µg/L and the fresh water aquatic life chronic criterion of 5.2 µg/L.

Furthermore, sediment toxicity tests conducted in Wills Creek, by the University of Maryland Wye Research Center, established that there is no toxicity in the sediment as a result of cyanide contamination. The bioassay toxicity tests indicated that it is unlikely that cyanide impacts survival and reproduction.



If future evidence suggests that cyanide deriving from Wills Creek is contributing to water-quality problems, then MDE will need to readdress the cyanide impairment.

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

Sincerely,

*Signed*

Jon M. Capacasa, Director  
Water Protection Division

cc: Melissa Chatham, MDE-TARSA  
Nauth Panday, MDE-TARSA

10/10/06

*Erratum: Page 2, paragraph 1, last sentence – the word “reproduction” should be “amphipod growth” because the bioassay did not evaluate reproduction, only survival and growth.*

