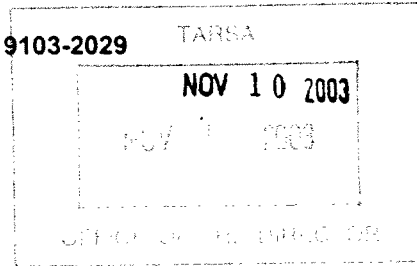




UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029



Richard Eskin, Acting Director  
Technical and Regulatory Services Administration  
Maryland Department of the Environment  
1800 Washington Boulevard, Suite 450  
Baltimore, Maryland 21230-1718

Dear Dr. Eskin:

The U.S. Environmental Protection Agency, Region III (EPA) has reviewed the Draft Final report entitled, "Water Quality Analysis of Heavy Metals for the Loch Raven Reservoir Impoundment in Baltimore County, Maryland," submitted by the Maryland Department of the Environment (MDE) for final Agency review on September 22, 2003.

EPA concurs with MDE's determination that the recent data show that a heavy metals total maximum daily load (TMDL) is not necessary for Loch Raven Reservoir. Loch Raven Reservoir was first listed by Maryland on its 1996 Section 303(d) list of water quality-limited segments as impaired by heavy metals, suspended sediments, and nutrients. In 2002, Maryland added fecal coliform, methylmercury, polychlorinated biphenyls, and biological impairments for Loch Raven Reservoir to the list. The mercury impairment was addressed separately in a TMDL completed by MDE in 2002. This water quality analysis only addresses the heavy metals impairment.

The water column data and sediment toxicity evaluation show that Maryland's water quality standards related to heavy metals are being met for this waterbody. Specifically, the data show that the freshwater aquatic life acute and chronic criteria, human health criteria for drinking water, and human health criteria for fish consumption, as applicable, are being met. The data from 2001 for arsenic, cadmium, total chromium, copper, nickel, lead, selenium, and zinc were all found to be below the criteria for those metal species, which were hardness-adjusted as appropriate. The ranges of water column concentrations were as follows:

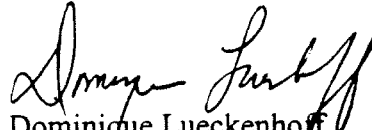
- Arsenic: nondetect to 0.33 ug/l
- Cadmium: nondetect to 0.01 ug/l
- Chromium: nondetect to 0.24 ug/l
- Copper: 0.45 to 0.76 ug/l
- Nickel: 0.09 to 0.65 ug/l
- Lead: nondetect to 0.02 ug/l
- Selenium: nondetect to 0.51 ug/l
- Zinc: nondetect to 7.79 ug/l



Antimony and beryllium were among the priority pollutant metals that were not expected to be present and were therefore not monitored. If in the future evidence suggests that a metal or metals from the Loch Raven Reservoir watershed are contributing to water quality problems, then action will have to be taken.

If you have any questions, please contact Ms. Susan Sciarratta at 215-814-5733.

Sincerely,



Dominique Lueckenhoff,  
Acting Associate Director  
Water Protection Division  
Office of Watersheds

cc: James George, MDE-TARSA  
Melissa Chatham, MDE-TARSA