



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029
11/10/2003

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 Lower Gunpowder Falls 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 Lower Gunpowder Falls. Lower Gunpowder Falls was first listed by Maryland on its 1996 Section 303(d) list of water quality-limited segments as impaired by heavy metals and nutrients. In 2002, Maryland added a biological impairment for Lower Gunpowder Falls to the list. This water quality analysis addresses only the heavy metals impairment.

The water column data 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, and human health criteria for fish consumption, as applicable, are being met. The data from 2001 and 2002 for arsenic, cadmium, total chromium, copper, mercury, 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 0.6 ug/l
- Cadmium: nondetect to 0.019 ug/l
- Chromium: nondetect to 1.04 ug/l
- Copper: 0.31 to 2.98 ug/l
- Mercury: 0.0004 to 0.0024 ug/l
- Nickel: nondetect to 1.45 ug/l
- Lead: nondetect to 0.27 ug/l
- Selenium: nondetect to 0.57 ug/l
- Zinc: 0.26 to 5.34 ug/l

If in the future evidence suggests that a metal or metals from the Lower Gunpowder Falls 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,

Signed

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

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