



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

MAY 06 2014

Mr. D. Lee Currey, Director  
Science Services Administration  
Maryland Department of the Environment  
1800 Washington Blvd., Suite 540  
Baltimore, Maryland 21230-1718

Dear Mr. Currey:

The U.S. Environmental Protection Agency (EPA), Region III, has reviewed the report *Water Quality Analysis of Mercury in Fish Tissue in Liberty Reservoir in Baltimore and Carroll Counties, Maryland*, which was submitted by the Maryland Department of the Environment (MDE) for final review on June 22, 2013. MDE has identified Liberty Reservoir, (MD-02130907\_Liberty\_Reservoir) on Maryland's 2012 Integrated Report (2012 IR) as impaired by mercury in fish tissue (2002), sediments-sedimentation/siltation (1996), nutrients-phosphorus (1996), and metals-chromium and lead (1996). The non-tidal portion of the Liberty Reservoir watershed has been identified by MDE on the State's 2012 IR as impaired by bacteria (mainstem only, 2002) and impacts to biological communities (2004) (MDE 2012). A Water Quality Analysis (WQA) for chromium and lead in Liberty Reservoir was approved by the EPA in 2003, and a bacteria TMDL for the nontidal portion of the watershed was approved by the EPA in 2009. TMDLs for phosphorus and sediments are being approved by EPA concurrently with this WQA. In the final 2012 IR, the biological listing was addressed by the Biological Stressor Identification analysis which more specifically identified chloride as a stressor to biological communities within the 1<sup>st</sup>- through 4<sup>th</sup>-order streams of the Liberty Reservoir watershed. As a result, in the 2012 IR, the biological impairment listing was replaced with a category 5 chlorides listing.

EPA agrees with MDE's analysis of the data that shows that the Liberty Reservoir is not impaired due to mercury in fish tissue and consequently, a Total Maximum Daily Load is not necessary. EPA recommended and Maryland adopted a numeric criterion concentration of methylmercury in fish tissue of 300.0 micrograms per kilogram ( $\mu\text{g}/\text{kg}$ ). The Liberty Reservoir mercury impairment was evaluated by collecting two, five-fish composite samples of trophic-level four fish (largemouth bass) from Liberty Reservoir in April 2012 and analyzing them for total mercury fish tissue concentrations. The composite samples had a median mercury concentration (199.3  $\mu\text{g}/\text{kg}$ ) that was substantially less than MDE's numeric criterion for the



Printed on 100% recycled/recyclable paper with 100% post-consumer fiber and process chlorine free.  
Customer Service Hotline: 1-800-438-2474

protection of human health via fish consumption. Therefore, the "fishable" designated use of the Liberty Reservoir is not impaired due to mercury in fish tissue.

Thank you for the opportunity to review the WQA. If you should have any questions, please contact Ms. Helene Drago, TMDL Program Manager, at 215-814-5796.

Sincerely,

S/n  
Jon M. Capafesa, Director  
Water Protection Division

cc: Melissa Chatham, MDE-SSA