

**Comment Response Document  
Regarding the Water Quality Analysis of Chromium and Lead for the  
Liberty Reservoir Impoundment  
Baltimore and Carroll Counties, MD**

**Introduction**

The Maryland Department of the Environment (MDE) has conducted a public review of the proposed Water Quality Analysis (WQA) of chromium and lead for the Liberty Reservoir impoundment. The public comment period was open from August 1, 2003 through August 30, 2003. MDE received two sets of written comments.

Below is a list of commentors, their affiliation, the date comments were submitted, and the numbered references to the comments submitted. In the pages that follow, comments are summarized and listed with MDE's response.

**List of Commentors**

<b>Author</b>	<b>Affiliation</b>	<b>Date</b>	<b>Comment Number</b>
Robert Koroncai	Office of Watersheds, U.S. Environmental Protection Agency	August 13, 2003	1 and 2
Lee Walker Oxenham	Patapsco Riverkeeper®	August 29, 2003	3 through 6

**Comments and Responses**

1. The commentor requested that the document include a clarification regarding whether or not the sediment samples that were tested for sediment toxicity were also chemically analyzed, or if chemical analyses were not performed because the samples did not exhibit toxicity to the test species (or another reason).

**Response:** Maryland conducted toxicity tests of the bottom sediments, which involves exposing test organisms to the sediments. The results of the toxicity tests indicated no toxicity. Consequently, it was not necessary to conduct sediment chemistry analyses. The following statement has been included in the second paragraph of Section 3.0 (Water Quality Characterization): "Sediment chemistry analysis was not conducted because toxicity was not observed in the ambient sediment bioassay."

2. The commentor requested that the document include a clarification regarding whether any relevant fish and benthic indices of biological integrity (IBI) data exist, as well as an evaluation of such data, as applicable.

**Response:** Such data does not exist because the fish and benthic IBIs developed by the Maryland Biological Stream Survey is not applicable in reservoirs, such as Liberty Reservoir.

3. The commentor stated that “initial, albeit cursory” testing performed by Patapsco Riverkeeper® of the impoundment for these heavy metals produced results which do not support delisting, and requests that the State perform additional testing of the Liberty Reservoir.

**Response:** The Department sent an e-mail to the commentor on September 2, 2003 requesting the Patapsco Riverkeeper’s “initial, albeit cursory” sampling results. In a September 4, 2003 response, the commentor downplayed these same results, referring to them as a “subsidiary issue”. To date, the Patapsco Riverkeeper data requested by the Department has not been provided; therefore, a determination cannot be made on the validity of the commentor’s statement. Additional testing is not warranted, as the data collected by the Department and presented in the WQA document supports delisting the Liberty Reservoir for chromium and lead. In fact, the measured values are typically one to two orders of magnitude below the criteria values.

4. The commentor stated that her request for additional sampling is further supported by the presence of natural chromium deposits and historic chromium mining in the Soldier’s Delight area.

**Response:** On the contrary, neither the natural chromium deposits or historic chromium mining in the Soldier’s Delight Area appear to have a detrimental impact on the chromium levels in Liberty Reservoir, as the chromium criteria was not exceeded by any of the 16 water column samples collected nor did any of the four sediment samples exhibit toxicity contributing to a reduction in growth. In particular, sampling station LI02 is located in close proximity to the natural chromium deposits noted by the commentor. The WQA document includes the results of both water column and sediment toxicity sampling performed at this station, which do not violate water quality standards.

5. The commentor requested results of sampling for heavy metals in Liberty Reservoir, particularly from 2002 and 2003.

**Response:** The 2001 sampling results provided in the document are the only such data MDE has. The Department did conduct a data solicitation in 2001 to request data from stakeholders regarding toxic substances in the waters of the Patapsco/Back River basin, including Liberty Reservoir; however, no data specific to Liberty Reservoir was made available. Sampling of Liberty Reservoir for heavy metals was not performed by the Department in either 2002 or 2003.

6. The commentor requested a public meeting to be held in the downtown Baltimore City area.

**Response:** This request for a public hearing is the only one received. Public hearings are offered by the Department in order to provide multiple commentors, who have made such requests, the opportunity to discuss the draft document at a single time and location and to allow the Department to consolidate such requests accordingly. The Department determined that, having received only a single such request, that insufficient broader interest in this WQA exists to warrant a formal public hearing; therefore, the request has been denied.

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However, the Department welcomes the opportunity to meet with the commentor to discuss her comments.