Comment Response Document
Regarding the Water Quality Analyses of Copper, Lead, Selenium, and Zinc in Zekiah Swamp, Prince George's and Charles Counties, Maryland

The Maryland Department of the Environment (MDE) has conducted a public review of the proposed Water Quality Analyses (WQA) of Copper, Lead, Selenium, and Zinc for Zekiah Swamp. The public comment period was open from May 17, 2006 through June 15, 2006. MDE received one set 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

Author	Affiliation	Date	Comment Number
Jennifer Sincock	U.S. Environmental Protection Agency Region 3	June 14, 2006	1 through 4

Comments and Responses

1. The commentor references Figure 1, page 3. The electronic file shows the location of Zekiah Swamp and the Lower Potomac River Tidal River in light yellow which is not visible when printed in black and white. Please make sure that all map features are visible for printing in black and white.

   Response: The watershed fill color on the location maps has been changed to a dark brown which is visible in black and white.

2. The commentor references Section 3.0, page 5, last paragraph and asks is there enough data to sufficiently show seasonal variation? University of Maryland Center for Environmental Science (UMCES) collected a sample at one station in April 2005. MDE collected samples at six stations on August 23, 2005 and August 30, 2005 under dry and storm event conditions, respectively. The commentor also asks what are the seasonal variations and critical conditions?

   Response: The August storm event sample captures the worst case scenario for elevated levels of metals. The Department is limited based on funding as to how many times we can sample in a year. Metals concentrations were significantly lower than their associated criteria under wet conditions; therefore, levels would also be below criteria during the remaining seasonal periods.

3. The commentor references Table 4, page 9 and requests an explanation as to why the lead (Pb) sample for ZEK-1 collected on 8/23/05 is missing from Table 4 and from Figure 5.

Response: Due to a laboratory error in analyzing the sample, the results were unacceptable for assessment purposes.

4. The commentor references Section 3.2, page 12 and states that the Interagency Review Draft had a paragraph discussing statistical analysis performed on the toxicity test data to determine if control and field sediment samples were statistically different. The commentor continues that this paragraph was deleted in the Public Notice Draft. The commentor requests an explanation of why this paragraph was deleted. The commentor also requests that EPA be provided with all data, statistical analyses, or other information used to support the sediment toxicity test results. The commentor additionally requests that the results of these analyses be included within the report or within an appendix.

   Response: Consistent with the level of technical detail reported in other comparable WQAs, the Department determined that the referenced paragraph was overly technical and unnecessary to explain its conclusions. Accordingly, the paragraph was removed. None of the field sediment results for survival and growth were significantly different than the control sediment samples. The Department, therefore, concluded that no toxicity exists. An analysis of significant differences was conducted using statistical software packages. The sediment toxicity report written by Daniel J. Fisher, Ph.D., Senior Research Scientist, University of Maryland does not contain the statistical software output and only states which values are significantly different. However, the report has been added as an appendix to the document.