



MARYLAND DEPARTMENT OF THE ENVIRONMENT

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MEMORANDUM

TO: Angie Garcia, US Environmental Protection Agency Region III
FROM: Jeff White
RE: Review of the Approval Letter and Decision Rationale for the Cash Lake Mercury Total Maximum Daily
DATE: December 7, 2011

Maryland Department of the Environment (MDE) has reviewed the US Environmental Protection Agency's (EPA) approval letter and decision rationale dated March 18, 2011 for the following Total Maximum Daily Load (TMDL):

Total Maximum Daily Load of Mercury for the Cash Lake Watershed, Prince George's County, Maryland

As a result of this review the following changes are requested:

Decision Rationale

Page 1, 2nd paragraph (Section I – 2nd paragraph), the basin identification is incorrect. The decision rationale says "MD-021311040938". The correct identification is "MD-021311040938-Cash Lake". It should also be specified in the decision rationale that this is Maryland's Integrated Report assessment unit identification.

Page 2, first paragraph (Section II – 1st paragraph), the rationale states that mercury loads are "attributed to three permitted point sources". This would be correct, since a Wasteload Allocation (WLA) is only assigned to National Pollutant Discharge Elimination System (NPDES) regulated stormwater sources within the basin, for which there are only three applicable permits; however, later in Section IV, the decision rationale states that there are only two NPDES regulated urban stormwater discharges, which is incorrect. Therefore, it appears as though the reference to three permitted point sources in section II includes the Wildlife Center Wastewater Treatment Plant (WWTP) (loads from which are deemed insignificant). If the reference to three permitted point sources does in fact include the Wildlife Center WWTP process water discharge, please revise the statement to indicate that there are four permitted point sources, and please clarify that even though the process water discharge was identified in the watershed, its loads were deemed insignificant. Section IV also needs to be revised as well, to indicate that there are three NPDES regulated urban stormwater discharges, rather than two.

Page 3, 2nd paragraph (Section III – 2nd paragraph), the decision rationale states, "The water quality impairment of the Cash Lake watershed consists of elevated levels of mercury, as identified in fish tissue". This statement is confusing. MDE suggests the statement be revised as follows: "The water quality impairment of the Cash Lake watershed consists of elevated levels of mercury in fish tissue".



Page 3, 2nd paragraph (Section III – 2nd paragraph), the decision rationale says that the TMDL was developed to ensure that the “aquatic life” designated use is supported. This is incorrect. The TMDL was developed to ensure that the “fishing” designated use is supported.

Page 3, 4th paragraph (Section III - paragraph 4), the decision rationale says, “CALPUFF was used by MDE to determine the specific sources of the mercury in the Cash Lake watershed and to determine their associated loadings”. This statement is confusing, since the only identified source of mercury to the impoundment, which is pointed out earlier in the decision rationale, is from atmospheric deposition. MDE recommends that the statement be revised as such, “CALPUFF was used by MDE to determine the current mercury loadings to the Cash Lake watershed from atmospheric deposition and the generalized source sectors of these atmospherically deposited loads”.

Page 5, 1st full paragraph (Section IV - paragraph 5), the decision rationale states, “In the impaired segment of Cash Lake, a TMDL was developed through computer modeling based on data collected throughout the watershed”. This statement is confusing, specifically the reference to the “impaired segment”, which implies that there is a portion of Cash Lake that is not impaired for mercury in fish tissue, as per the Integrated Report. Operating under the assumption that the point of this paragraph is to explain that Cash lake was identified as impaired by elevated mercury levels in fish tissue, and that a TMDL was subsequently developed to reduce mercury loadings to a level that meets water quality standards, MDE recommends that EPA completely remove the statement, “A TMDL was developed for Cash Lake through computer modeling based on data collected throughout the watershed”.

Page 5, Table 5 (Load Allocations sub-section of Section IV – Table 5), the table should be revised or completely omitted from the report. The preceding paragraph describes how the Load Allocation (LA) and WLA were apportioned out from the total TMDL by applying the urban land use percentage within the watershed (11% - including the surface of the impoundment); however, the table seems to indicate that the total TMDL of 88.83 grams per year (g/yr) is assigned to the LA, when a portion of the total 88.83 g/yr is apportioned to the WLA.

Page 6, 1st paragraph (Wasteload Allocations sub-section of Section IV – first paragraph), All of the text prior to the statement, “There are no individual industrial point sources in the Cash Lake watershed”, which discusses the percent of the total atmospherically deposited load that from comes from various sources [i.e., in state Electrical Generating Units (EGUs), out-of-state EGUs, etc.], does not seem applicable to this section. MDE recommends that this text be moved to Section III following the discussion of the CALPUFF model.

