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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 Millington Wildlife Management Area Ponds Mercury Total Maximum Daily Load
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 Watersheds Draining to the Millington Wildlife Management Area Ponds, Kent County, Maryland

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

Decision Rationale

Page 2, 2nd paragraph (Section II – 2nd paragraph), the decision rationale says, "The TMDL developed for the mercury impairment in Millington Wildlife Management Area (WMA) Ponds is presented in grams per year (g/yr) in Tables 1 and 2". This statement is incorrect. First, Table 2 is incorrectly identified as Table 1 (i.e., there are two tables identified as Table 1). Also, Table 2 presents the Mercury TMDL as a maximum daily load presented in grams/day. The second Table 1 should be correctly identified as Table 2, and MDE recommends that the aforementioned statement be revised to read, "The TMDL developed for the mercury impairment in Millington WMA Ponds is presented in Table 1 in grams per year (g/yr) and Table 2 in grams/day (g/day)".

Page 3, 2nd full paragraph (Section III – 3rd paragraph), in describing the applicable designated uses within the nontidal portion of the Upper Chester River watershed, the decision rationale says that the Use I designation includes the Millington WMA Pond Two. The Use I designation applies to all of the Millington WMA Ponds, not solely Pond Two. The decision rationale should be revised to reflect this.

Page 3, 2nd full paragraph (Section III – 3rd paragraph), the decision rationale states, "The water quality impairment in Millington WMA Pond Two consists of an elevated level of mercury, as identified in fish tissue". This statement is confusing. MDE suggests the statement be revised as follows: "The water quality impairment in Millington WMA Pond Two consists of an elevated level of mercury in fish tissue".

Page 3, 2nd full paragraph (Section III – 3rd 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 4, 1st paragraph (Section III - paragraph 5), the decision rationale says, "CALPUFF was used by MDE to determine the specific sources of the mercury impairment in Millington WMA Pond Two and to determine the specific loadings for each source". 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 Millington WMA Pond Two watershed from atmospheric deposition and the generalized source sectors of these atmospherically deposited loads".

Page 4, 3rd paragraph (Section IV - 1st paragraph), the decision rationale refers to the TMDL for Millington WMA Pond Two. This introductory paragraph to Section IV of the decision rationale makes two primary points: 1) EPA determined that the TMDL met all of the necessary requirements, and 2) EPA is therefore approving the TMDL. Since the decision rationale is referring to the TMDL in a general context in this particular instance, rather than to specific baseline loadings, maximum allowable loadings, fish tissue concentrations, etc., MDE recommends that EPA refer to the Millington WMA Ponds, instead of Pond Two only. Within the TMDL, MDE says that even though the maximum allowable loading presented within the document was calculated using only data from and watershed conditions associated with Pond Two, it is applicable to all of the other ponds in the WMA, since the entire mercury loading to all of the ponds is from atmospheric deposition, and the ponds are located extremely close geographic proximity.

Page 5, 1st full paragraph (Section IV - paragraph 4), the decision rationale states that, "Millington WMA Pond Two was first identified for methylmercury residue in fish tissue on Maryland's 2002 Integrated Report". Since the decision rationale is referring to the actual Integrated Report listing, which is for all of the Millington ponds, MDE recommends that the statement be revised to indicate that, "the Millington WMA Ponds were first identified for methylmercury residue in fish tissue on Maryland's 2002 Integrated Report".

Page 5, 2nd full paragraph (Section IV - paragraph 5), the decision rationale states, "In the impaired segment of Millington WMA Pond Two, a TMDL was developed through computer modeling based on data collected throughout the watershed". This statement is confusing, specifically reference to the "impaired segment", which implies that there is a portion of the Millington WMA Ponds 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 the Millington WMA Ponds were 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 the Millington WMA Pond Two through computer modeling based on data collected throughout the watershed".

Page 6, 2nd paragraph (Wasteload Allocations sub-section of Section IV – first paragraph), All of the text prior to the statement, "There are no permitted point sources located within the Millington WMA", 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.

Page 7, 1st full paragraph (Wasteload Allocations sub-section of Section IV – last paragraph), the decision rationale states, “It is expected that MDE will require periodic monitoring of the point source(s) for bacteria, through the NPDES permit process”. The inclusion of the entire paragraph in which the statement is located, which discusses how National Pollutant Discharge Elimination System (NPDES) permits should be consistent with specified TMDL Wasteload Allocations (WLAs), does not seem necessary, since there are no NPDES permitted point sources in the watershed. MDE would recommend that this paragraph be completely removed, so that the WLA section solely states that no permitted point sources were identified within the watershed; therefore no WLA was assigned. MDE does, however, understand this paragraph’s inclusion, relative to EPA decision rationale formalities. If EPA decides to keep this paragraph in the decision rationale, the aforementioned statement should still be revised as follows: “It is expected that MDE will require periodic monitoring of the point source(s) through the NPDES permit process”. Furthermore, MDE would suggest that EPA add a statement to this paragraph that no permitted point sources were identified in the watershed, and therefore no WLA was assigned.