

From: [Krisztian, George \(DEQ\)](#)
To: [Wyant, Dan \(DEQ\)](#); [Sygo, Jim \(DEQ\)](#); [Thelen, Mary Beth \(DEQ\)](#); [Shaler, Karen \(DEQ\)](#); [Wurfel, Brad \(DEQ\)](#); [Pallone, Maggie \(DEQ\)](#); [Tommasulo, Karen \(DEQ\)](#); [Shekter Smith, Liane \(DEQ\)](#)
Subject: FW: Preliminary and Deliberative - Not Subject to FOIA: Health based drinking water values
Date: Monday, October 12, 2015 3:56:31 PM

Based on the information below it does not appear that copper is going to be an issue.

George L. Krisztian
 Flint Action Plan Coordinator
 Laboratory Director
 Michigan Department of Environmental Quality
 Desk ph (517) 284-6719
 Cell ph (517) 204-0381

From: Flaga, Christine (DEQ)
Sent: Monday, October 12, 2015 3:02 PM
To: Krisztian, George (DEQ)
Cc: Dykema, Linda D. (DHHS); Schrantz, Phil (DEQ); Leeming, Susan (DEQ); Winters, Bobbie Jo (DEQ); Wildfang, Eric (DEQ)
Subject: Preliminary and Deliberative - Not Subject to FOIA: Health based drinking water values

George,

Here is the information you requested during our conversation this afternoon.

The current Part 201 drinking water criterion (DWC) for copper is based on the Secondary Maximum Contaminant Level (SMCL) of 1,000 ppb. The DWC is footnoted with an (E) which means it is based on an aesthetic value. ***The current Health-based Drinking Water Value for copper is 1,400 ppb.*** Since the health-based value is higher than the aesthetic value, the final criterion is the lower aesthetic value in order to protect for both health and aesthetics.

The current Part 201 DWC for Lead is 4.0 ppb if the soil concentration is approximately 400,000 ppb (400 ppm). These are health based values. A higher value in drinking water is allowed (up to the State drinking water action level of 15 ppb) if the soil and drinking water combination is appropriate. The criteria for lead are footnoted with (L) which explains that the criteria are derived using an EPA biologically based model (the Model). The Model considers all primary exposures to lead (i.e. drinking water, air, soil, and diet) and predicts the blood lead concentration in children aged 0-7 years. The Model can also use an acceptable blood lead level to solve for an acceptable soil or drinking water concentration. The lead criteria for soil direct contact and drinking water are linked through the use of the Model which explains why RRD has provided a sliding scale of acceptable drinking water and soil concentration combinations in footnote (L).

RRD is currently in the process of updating all of the cleanup criteria. Until all of the input values have been updated, the criteria calculator built, and draft criteria generated and QA/QC'd, we do not know what the updated criteria will be. We plan

to have draft criteria available by the end of the calendar year.

Finally, the Toxics Steering Group (TSG) just met this morning to discuss a risk assessment conducted by DHHS toxicologists to determine an acceptable lead drinking water concentration for Flint area elementary schools. A Subcommittee was formed to evaluate and provide comment back to DHHS on behalf of the TSG by COB October 16, 2015.

Let me know if you have any questions.

Christine Flaga

Toxicology Unit Manager

Remediation and Redevelopment Division

Department of Environmental Quality

P.O. Box 30426

Lansing, MI 48909-7926

Phone #: 517-284-5098

flagac@michigan.gov