
From: Flaga, Christine (DEQ)
Sent: Monday, December 07, 2015 11:51 AM
To: Sygo, Jim (DEQ); Wagner, Robert (DEQ)
Cc: Wildfang, Eric (DEQ); Schrantz, Phil (DEQ); Shaler, Karen (DEQ); Winters, Bobbie Jo (DEQ)
Subject: FW: lead values

Jim and Bob,

Eric ran the Lead Model this morning as requested by you, Jim, on Friday. The model was run using the updated blood lead reference value of 5 µg/dl as well as all of the other updated input parameters. These are the same updated parameters as used by DHHHS in conducting their risk assessment for Flint drinking water i.e., the drinking water ingestion rates, maternal blood lead concentration and the Michigan-specific outdoor air concentration of 0.01 µg/m³. Assuming a drinking water lead concentration of 0, the resulting acceptable soil lead concentration is 195 ppm.

Let us know if you have any further questions.

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From: Wildfang, Eric (DEQ)
Sent: Monday, December 07, 2015 9:03 AM
To: Flaga, Christine (DEQ)
Subject: lead values

Per Sygo's request:

IEUBK Parameter	IEUBK Default Value	Modeled Value
Blood lead concentration reference level (µg/dl)	10	5
Maternal blood lead concentration at childbirth (µg/dl)	1.0	0.8
Outdoor air lead concentration (µg/m ³)	0.1	see below
Drinking water ingestion rates (L/day)		
0-1 year	0.2	0.32
1-2 year	0.5	0.271
2-3 year	0.52	0.317
3-4 year	0.53	0.327
4-5 year	0.55	0.327
5-6 year	0.58	0.327
6-7 year	0.59	0.414

IEUBK model results (assuming 5% probability of exceeding the blood lead concentration level):

Drinking Water Pb concentration ($\mu\text{g/L}$)	Air Pb concentration ($\mu\text{g/m}^3$)	Soil Pb concentration (mg/kg)
15	0.01	108
4	0.01	172
0	0.01	195
0	0	196