From: Shekter Smith, Liane (DEQ)
Sent: Friday, November 13, 2015 11:18 AM
To: Benzie, Richard (DEQ);Prysby, Mike (DEQ)
Cc: Kuhl, Richard (AG)
Subject: ATTORNEY-CLIENT PRIVILEGE WORK PRODUCT: Draft paragraph - needs review and additional data.

Importance: High

I. The Flint River – is it a safe source of drinking water?

In Michigan, we are fortunate to have high quality drinking water sources. Seventy percent of Michigan's population receives its drinking water from surface water sources, most with intakes in the Great Lakes. A handful of public water supplies in Michigan do treat water from inland sources such as rivers or groundwater under the influence of surface water.
All surface water or groundwater under the influence of surface water requires significant treatment in order to be safe for consumption. Treatment of surface water is referred to under the SDWA as "complete treatment". While all surface water sources must receive this higher level of treatment, river sources present a greater challenge than water withdrawn from one of the Great Lakes. Under most circumstances, rivers are prone to greater fluctuations in temperature, have higher amounts of organic material, greater turbidity (suspended solids), and more microbiological and viral contamination than Lakes Huron, Erie, Michigan or Superior.

It should be noted, that while the water chemistry in the Flint River differs from that in Lake Huron, it can still be treated in accordance with the SDWA and Act 399. Many cities across the country rely on similar sources for drinking water.
Also, it is not the source water that reacts with the homeowners plumbing out in the distribution system, but rather the finished water quality that is important. To begin with, neither the Flint River nor the treated water leaving the City of Flint's water treatment plant contains lead. In addition, the treatment process employed by the City of Flint includes lime softening to reduce the hardness in the river water. Lime softening is not a process that would typically be thought to increase corrosivity of water. The City of Flint, however, does practice recarbonation to adjust pH at the end of the treatment process. pH levels of finished water leaving the City of Flint's water treatment plant averaged 7.7. Water monitoring conducted quarterly at 25 sample sites located throughout the distribution system showed the following:

July – September 2014	average pH = 7.71	range: 7.56 – 7.86
October – December 2014	average pH = 7.88	range: 7.62 – 8.10
January – March 2015	average pH = 7.81	range: 7.60 – 7.99
April – June 2015	average pH = ???	range: ???

These numbers compare to the water delivered by DWSD. NEED TO INSERT HERE.