## National Institute of Environmental Health Sciences (NIEHS) Comments on the Interagency Science Discussion Draft IRIS Toxicological Review of Trichloroacetic Acid (dated July 2011)

Comments on the Draft EPA Toxicological Review of Trichloroacetic Acid

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Overall, the document was well-written and provided a comprehensive review of the available literature. The rationale for selection of the DeAngelo et al., 2008 study for derivation of the RfD was clear and well justified. The document adequately and appropriately identified and described the limitations in the carcinogenic database for TCA. The discussion regarding the potential MOA, particularly related to PPAR $\alpha$ -mediated events, was particularly thorough and balanced supporting the conclusion that the TCA MOA is complex and PPAR $\alpha$  agonism may not be the sole MOA.

If appropriate, consider including a couple of sentences in the chemical and physical property section about the levels of TCA found in finished drinking water and the factors contributing to the formation of TCA in drinking water.

The document could be strengthened by providing a brief discussion of the relative hepatocarcinogenic potency of TCA, DCA and MCA, particularly related to hypothesized PPARα-dependent and independent MOAs.