



Memorandum

Date: July 13, 2011

From: Agency for Toxic Substances and Disease Registry

Subject: Comments on EPA's Toxicological Review of trichloroethane (TCE)

To: Environmental Protection Agency

We appreciate the opportunity to review EPA's Toxicological Review of TCE and the accompanying Science Advisory Board (SAB) peer review. Overall, we found the draft IRIS Toxicological Review and fact sheet well-written, comprehensive, and convincing.

We consider the RfD of 0.0005 mg/kg/d to be sufficiently supported by studies indicating heart malformations in rats, adult immunological effects in mice, developmental immunotoxicity in mice, and toxic nephropathy in rats. We agree with EPA's use of uncertainty factors applied to the PODs for these calculations. We also believe the RfC to be sound, as it is based mostly on the same studies as the RfD. Finally, we agree with the SAB peer review and the final EPA document stating that TCE is a human carcinogen based on convincing evidence that TCE exposure can cause kidney cancer, as well as very strong (though maybe not yet convincing) evidence that TCE can cause both NHL and liver cancer.