1.1 Using Bioavailability Information

The current best practices presented here for using bioavailability in risk assessments are supported by scientific literature as well as applicable state and federal guidance. USEPA has long recognized the relevance of bioavailability to risk assessment (USEPA 1989b) and has developed specific guidance on using bioavailability in the risk assessment of lead-contaminated sites (USEPA 2007b). USEPA has also made significant efforts to summarize and evaluate the bioavailability of arsenic from soil (USEPA 2012d; USEPA 2017c; e; g). Additionally, USEPA completed a review of the available information on dioxins (USEPA 2014d).

At the state level, guidance documents on the evaluation of arsenic are available from California and Hawaii (DTSC 2016b; Hawaii DOH 2010; Hawaii DOH 2012).

The development of a consensus method for estimating PAH bioavailability is lagging that of lead and arsenic, despite considerable interest. The PAH chapter summarizes current scientific and regulatory information.