

Interim  
Final



# Technical Guidance Manual for the Implementation of the Hawai`i State Contingency Plan

## SECTION 10

### DATA QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC)



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## ACRONYMS AND ABBREVIATIONS

<b>%</b>	Percent
<b>COC</b>	Chain-of-custody
<b>COPC</b>	Chemical (or Contaminant) of potential concern
<b>DU</b>	Decision unit
<b>DQO</b>	Data quality objectives
<b>EAL</b>	Environmental action level
<b>FID</b>	Flame-ionization detector
<b>GC</b>	Gas chromatograph
<b>HDOH</b>	Hawai'i Department of Health
<b>HEER Office</b>	HDOH Hazard Evaluation and Emergency Response Office
<b>LCS</b>	Laboratory control sample
<b>LCSD</b>	Laboratory control sample duplicate
<b>MIS</b>	<i>Multi-increment</i> sample
<b>MS</b>	Matrix spike
<b>MSD</b>	Matrix spike duplicate
<b>PARCC</b>	Precision, accuracy, representativeness, completeness, and comparability
<b>PCB</b>	Polychlorinated biphenyls
<b>PID</b>	Photo-ionization detector
<b>QA</b>	Quality assurance
<b>QAPP</b>	Quality Assurance Project Plan
<b>QA/QC</b>	Quality assurance and quality control
<b>QC</b>	Quality control
<b>RL</b>	Reporting limits
<b>RPD</b>	Relative percent difference
<b>RSD</b>	Relative standard deviation
<b>SAP</b>	Sampling and analysis plan
<b>SOP</b>	Standard operating procedures
<b>SVOC</b>	Semivolatile organic compound
<b>UCL</b>	Upper confidence level
<b>USEPA</b>	United States Environmental Protection Agency
<b>VOA</b>	Volatile organic analysis



## 10.0 DATA QUALITY ASSURANCE AND QUALITY CONTROL

The State of Hawai'i Department of Health (HDOH) Hazard Evaluation and Emergency Response Office (HEER Office) regards the quality of data as crucial to proper site characterization and evaluation of potential environmental hazards at a site. Data must be of sufficient quality to ensure that the overall site assessment objectives are met using the systematic planning approach (see Section 3). Ensuring that data is of sufficient quality begins during the initial planning and development of site investigation objectives and continues throughout the investigation to the final assessment of data quality. The HEER Office also regards evaluation of the suitability and usability of data as essential during both the site investigation and data quality documentation process.

The quality assurance and quality control (QA/QC) process should also be viewed as an approach to:

1. Ensure that site characterization data are adequate to accurately define site impacts and evaluate potential environmental hazards
2. Maximize the potential that any remedial actions at a site will be correctly selected
3. Ensure that site management decisions are arrived at with the correct information

Not devoting proper time and resources to QA/QC at any stage of investigation may result in uncertainty as to whether conclusions or actions are sufficiently protective of human health and the environment; this deficiency may be compounded by the need to make up for wasted time and resources.