Table A-1-4 - Summary of Quality Control Procedures, Criteria, and Corrective Actions for PCB and TPH Analysis

PCBs EPA 8082 GC/ECD & NWTPH-Dx			
Quality Control Check	Frequency	Acceptance Criteria	Corrective Action
Field Quality Control			
Duplicate	1 every 20 or fewer field samples	≤ 40% RPD (soil)	Evaluate data for usability
Laboratory Quality Control			
Method blank	1 per batch of every 20 or fewer samples	All analytes < reporting limit	Re-extract and reanalyze associated samples unless concentrations are > 5 x blank level
Initial calibration	5-point external calibration prior to analysis of samples	%RSD < 20%	Recalibrate instrument
Continuing calibration	Every 10 samples with mid-range standard	% Difference ≤ 20% of initial calibration	Recalibrate instrument and re-analyze affected samples
System monitoring compounds (surrogates)	Every lab and field sample	Laboratory control chart limits	Evaluate data for usability
Retention time windows	All samples and continuing calibration checks	±0.06 relative retention time units (sample and standard)	Reanalyze affected samples
Matrix spike (PCBs only)	1 per batch of every 20 or fewer samples	Laboratory control chart limits	Evaluate data for usability
Laboratory duplicate (TPH only)	1 per batch of every 20 or fewer samples	Laboratory control chart limits	Evaluate data for usability
Matrix spike duplicate (PCBs only)	1 per batch of every 20 or fewer samples	Laboratory control chart limits	Evaluate data for usability
Laboratory control sample	1 per batch of every 20 or fewer samples	Laboratory control chart limits	Evaluate data for usability