Data Acceptability Criteria for Analysis of Water Quality Samples for Bacteria--Pathogen Indicators

QA Procedure	Parameter	Frequency[1]	Criterion	Corrective Action
Coliform and Enterococcus Bacteria Analyses				
Field Blanks	Contamination	1 per event	< TRL *or* < sample ÷ 5	Examine field log. Identify contamination source. Qualify data as needed.
Lab Method Blanks (Sterility Checks)	Contamination	1 per batch	< TRL	Identify contamination source. Clean equipment and slides. Check reagents. Re-analyze blank.
Lab Duplicate	Precision[2]	1 per 10 samples, and at least 1 per batch	$R_{log} \leq 3.27 \cdot$ mean R_{Log}	Recalibrate and reanalyze.
Lab Negative Control Samples	Contamination	1 per culture medium or reagent lot	< TRL	Identify source. Clean equipment and prepare new media. Re-examine negative control.
Lab Positive Control Samples	Assay function	1 per culture medium or reagent lot	≥ TRL	Identify and correct problem. Re-examine positive control.
Assess percent of data successfully collected	Data Completeness	1 per planned sample event	90%	Reschedule sample events as necessary or appropriate.

Notes: TRL = Target Reporting Limit
(1) The method documentation defines an analytical batch as an "uninterrupted series of analyses".
(2) R_{log} is the absolute difference between logarithms of coliform counts for duplicate analyses. The mean R_{log} is determined by performing duplicate analyses on the first 15 positive samples analyzed for each matrix type.