

BIOLOGICAL RESULTS INTERPRETATION AND APPROPRIATE ACTIONS

PRE-FLUSH ANALYSIS RESULTS IN THE ABSENCE OF POST-FLUSH ANALYSIS CONTAMINATION

Sample Taken		Result Interpretation	Action Required (Initial Sample)	Action Required (Re-Sample)			
Pre-Flush	Post-Flush						
Negative	Negative	No contamination detected in sample	No Action Required	Not Applicable			
Insignificant	Negative	Contamination probably localised only	Flush out thoroughly	Review Management & Control Programme to ensure adequate and correct implementation			
Significant	Negative	Contamination probably localised only	Chemically clean outlet. Flush outlet thoroughly and re-sample. If responding to a TVCC "failure". In addition to TVCC, collect Legionella sample.	Negative	Insignificant	Significant	Highly Significant
				No Action Required	Review Management & Control Programme to Ensure adequate and correct implementation	Take outlet out of use immediately. Chemically clean, disinfect and replace outlet. Flush outlet thoroughly and re-sample. Collect TVCC & Legionella samples Investigate local installation and fittings and search for dead-legs, non WRAS approved materials Repeat Process If continued use of outlet is required, consider the installation of a Point-of-use (POU) filter until Negative or Insignificant results obtained.	
Highly Significant	Negative	Contamination probably localised only	Take outlet out of use immediately. Chemically clean/replace outlet. Flush outlet thoroughly and re-sample. If responding to a TVCC "failure". In addition to TVCC, collect Legionella sample.				

POST-FLUSH ANALYSIS RESULTS IN THE ABSENCE OF PRE-FLUSH ANALYSIS CONTAMINATION

Sample Taken		Result Interpretation	Action Required (Initial Sample)	Action Required (Re-Sample)			
Pre-Flush	Post-Flush						
Negative	Negative	No contamination detected in sample	No Action Required	Not Applicable			
Negative	Insignificant	Contamination probably systemic	Flush outlet and system thoroughly	Review Management & Control Programme to ensure adequate and correct implementation			
Negative	Significant	Contamination probably systemic	Flush outlet and system thoroughly and re-sample.	Negative	Insignificant	Significant	Highly Significant
			If responding to a TVCC "failure". In addition to TVCC, collect Legionella sample.				
Negative	Highly Significant	Contamination probably systemic	Take system out of use immediately. Instigate system decontamination and re-sample.	No Action Required	Review Management & Control Programme to Ensure adequate and correct implementation	<p>Take system out of use immediately. Instigate system disinfection and re-sample. (not earlier than 48hrs following disinfection). Collect TVCC & Legionella samples.</p> <p>Investigate local installation and distribution system and fittings and search for dead-legs, non WRAS approved materials</p> <p>Repeat Process</p> <p>If continued use of outlet is required, consider the installation of a Point-of-use (POU) filter until Negative or Insignificant results obtained.</p>	
			If responding to a TVCC "failure". In addition to TVCC, collect Legionella sample.				

POST-FLUSH ANALYSIS RESULTS IN THE PRESENCE OF PRE-FLUSH ANALYSIS CONTAMINATION

Sample Taken		Result Interpretation	Action Required (Initial Sample)	Action Required (Re-Sample)			
Pre-Flush	Post-Flush						
Negative	Negative	No contamination detected in sample	No Action Required	Not Applicable			
Insignificant	Insignificant	Contamination probably systemic with localised contamination	Flush outlet thoroughly	Review Management & Control Programme to ensure adequate and correct implementation			
Significant	Significant	Contamination probably systemic with localised contamination	Flush outlet and system thoroughly and re-sample. If responding to a TVCC "failure". In addition to TVCC, collect Legionella sample.	Negative	Insignificant	Significant	Highly Significant
				No Action Required	Review Management & Control Programme to Ensure adequate and correct implementation	<p>Take system out of use immediately. Chemically clean, disinfect or replace outlet. Instigate system disinfection and re-sample. (not earlier than 48hrs following disinfection).</p> <p>Collect TVCC & Legionella samples.</p> <p>Investigate local installation and distribution system and fittings and search for dead-legs, non WRAS approved materials</p> <p>Repeat Process</p> <p>If continued use of outlet is required, consider the installation of a Point-of-use (POU) filter until Negative or Insignificant results obtained.</p>	
Highly Significant	Highly Significant	Contamination probably systemic with localised contamination	Take system out of use immediately. Chemically clean outlet. Instigate system decontamination and re-sample. If responding to a TVCC "failure". In addition to TVCC, collect Legionella sample.				

BIOLOGICAL ANALYSIS RESULTS INTERPRETATION KEY – DOMESTIC WATER SYSTEMS

Analysis Sample	Reported Results	Result Interpretation
Aerobic count TVCC (22°C or 37°C)	None Detected	Negative
	22°C >10 ¹ cfu/ml - <10 ³ cfu/ml	Insignificant
	37°C >10 ¹ cfu/ml - <10 ² cfu/ml	
	22°C >10 ³ cfu/ml - <10 ⁴ cfu/ml	Significant
	37°C >10 ² cfu/ml - <10 ⁴ cfu/ml	
	22°C >10 ⁴ cfu/ml - <10 ² cfu/ml	Highly Significant
	37°C >10 ⁴ cfu/ml - <10 ² cfu/ml	
Legionella spp.	None Detected	Negative
	<10 ² cfu/l	Insignificant
	>10 ² cfu/ml - <10 ⁴ cfu/ml	Significant
	>10 ⁴ cfu/l	Highly Significant
Coliforms and E.coli.	None Detected	Negative
	<1cfu/100ml	Negative
	>1cfu/100ml	Highly Significant
Pseudomonas spp.	None Detected	Negative
	<10cfu/100ml	Significant
	>10cfu/100ml	Highly Significant
Pseudomonas aeruginosa	None Detected	Negative
	<1cfu/100ml	Negative
	>1cfu/100ml	Highly Significant