

Testing Summary

Testing	Equipment	Treatment Stage	Comments
Hydraulic load	Data loggers or water meter (excluding external use)	Influent and effluent	Collect at same or greater frequency as bio-chemical data
Household behaviour	Note timing (holidays, laundry, showers) and chemical inputs (products)	Source	Wastewater generation
Sludge / scum	Sludge Judge, Sonic Sludge Stick	Primary mainly. All other chambers too	Retain >24hr HRT, sludge management
Faecal coliforms (E. coli)	Laboratory	Final effluent	E.coli used as pathogen indicator
Biological oxygen demand (BOD ₅)	Laboratory	Influent and effluent	Performance indicator
Total suspended solids (TSS)	Laboratory	Influent and effluent	Performance indicator
Free residual chlorine	Test kit (Chemets) or calibrated meter	Disinfection chamber	0.5-2mg/L
Phosphorus	Laboratory	Influent and effluent	
Nitrogen	Laboratory	Influent and effluent	TKN in clarification chamber for aerobic systems
pH	pH strips, calibrated meter or laboratory	Influent and effluent, aeration	OWMS steady near 7 (6-9 pH OK)
Electrical conductivity	Calibrated meter or laboratory	Influent and effluent	
Turbidity	Turbidity tube	Clarification/ final effluent	Performance indicator Disinfection – UV (<1NTU) chlorine (<5NTU)
Dissolved oxygen (DO)	Test kit (Chemets) or calibrated meter	Aeration in secondary treated effluent	2-4mg/L
Settleability	Imhoff Cone or similar conical clear container	Aeration in activated sludge plants	Assist management
Odour	Observation	All	Performance indicator
Foaming	Observation	Aeration	Detergents or filamentous bacteria?
Colour	Observation	All – solids and liquids	Performance indicator

