

Table S6. Synergism of different UV pre-irradiation time to inactivate chironomid larvae

Inactivation Method	Inactivation Count at 8 h (log)	S_n	$k_{max} (h^{-1})$	R^2	S_k
UV alone	0.10	-	0.012	0.996	-
ClO ₂ alone	0.47	-	0.097	0.990	-
Direct UV+ClO ₂	1.00	1.698	0.165	0.984	1.506
Pre-oxidation (30 min)	1.01	1.732	0.168	0.979	1.534
Pre-oxidation (60 min)	1.03	1.817	0.143	0.995	1.306
Pre-oxidation (90 min)	1.13	1.991	0.179	0.903	1.636