

ONSHORE TANK CLEANING AND SYSTEM DISINFECTION

Minimising the risk of pathogenic micro-organisms and biofilm in water storage tanks and distribution systems on onshore facilities

Over time, deposits can settle on the base of water storage tanks. The deposits can provide nutrients for bacterial growth which can lead to the formation of slimes or biofilm around the water interface. Intertek helps you reduce and mitigate this risk with bespoke risk assessments, testing and documentation support.



If left unchecked, deposits and biofilm on the base of water storage tanks can support the growth of potentially pathogenic micro-organisms. To avoid degradation of the tanks, periodic cleaning and disinfection should be carried out by competently trained personnel (based on the findings from annual tank inspections).

With many premises having been empty or operating with minimal personnel on site, water tanks may have been stagnant for some time, increasing the associated risk of potentially harmful bacteria forming.

These disinfections are conducted during commissioning of a system, following tank cleaning work or if a system has become colonised by bacteria such as Legionella. If colonisation has occurred, use of standard biocides such as chlorine will not be effective as this does not penetrate and remove biofilm (Legionella bacteria is known to hide within this slime and cause re-growth issues).

Testing: The process

An Intertek expert selects an appropriate biofilm, removing chemical based on system metallurgy and level of colonisation to achieve successful disinfection. We then develop bespoke site specific risk assessments and method statements, detailing step-by-step actions for the cleaning and disinfection process.

It is important to consider all the factors that impact the outcome of tank cleaning and disinfection, and ensure appropriate health and safety measures are taken. Deliverables on completion of the work are a hygienic water

system, and a report and certificate detailing the criteria met to achieve this.

Intertek conducts additional testing to demonstrate the successful treatment of the system. This can be performed on-site by testing for ATP (an energy molecule produced by microbial activity) both before and after the disinfection. Water samples can be taken for UKAS accredited testing to confirm successful disinfection.

Documentation: HSG 274 (part 2)

Keeping thorough documentation of tank cleaning and chemical treatment is vital for demonstrating compliance with HSG 274 (part 2) and British Standards for conducting cleaning and disinfection.

Intertek provides detailed disinfection reports including before and after cleaning tank photographs. These reports document chemical strengths achieved, the applied contact times, based on strength and pH level (if using chlorine which is pH dependent).

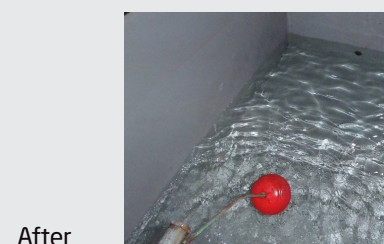
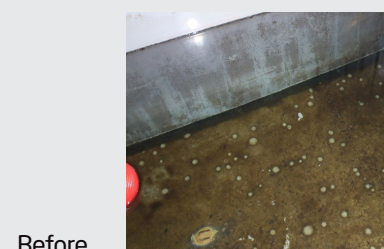
A certificate is supplied, detailing the system treated, date carried out and details the technical authority who signed off on the project.

The Intertek advantage

As members of the Legionella Control Association, our disinfection practices meet these standards.

Intertek's water hygiene technicians are highly trained to City & Guilds standard and competency assessed for carrying out cleaning and disinfections.

Example of tank before and after cleaning and disinfection



FOR MORE INFORMATION

+44 1224 708500

ukenquiries@intertek.com

intertek.com/exploration-
production/