

Introduction

The following work will be carried out in accordance with British Standard Institute BS 8558:2015 recommendations and the HSE ACOP L8 Code of Practice Legionnaires' disease document guidelines.

The success of disinfecting temporary water vessels such as static tanks and towable bowzers depends on the chlorinating solution being in contact with clean surfaces.

Process

The vessel will be pumped empty using a submersible or barrel type pump.

The cleaning required will depend on the extent and nature of fouling, which may include:

Corrosion and Hardness Deposits – Loose deposits will be hosed or vacuumed out. Deposits adhering to the surface will be treated by a combination of hand scraping and brushing together with application of chemicals to dissolve or soften any scale.

Organic Fouling – Loose debris will be washed out or manually removed after the application of chlorine. Any remaining stubborn growths will be manually scraped off after application of suitable cleaning agents.

Finally, where possible the tank/bowser will be steam cleaned using a portable steam washer.

Oil and Grease – Contaminants on the tank/bowser surfaces will be removed using white spirit. Where possible the tank/bowser will then be steam cleaned using a portable steam washer.

Disinfection Procedure – This will be carried out in accordance with the British Standard BS 8558:2015 Section 10.1 to 11 guidelines with the tank/bowser being fully charged with wholesome water containing a minimum residual free chlorine level of a set contact period as set out in the document. Various free chlorine concentrations and time constraints are available to take into account possible corrosion risks to the tank/bowser construction materials from the chlorine disinfectant.

All valves and fittings attached to the vessel will be disinfected using a chlorine spray.

The chlorinated water will be neutralised before disposal and the tank/bowser flushed with fresh wholesome water before being drained and refilled again with fresh wholesome water.

In line with guidelines set out in BS 8558:2015 a sample will be taken for laboratory analysis to assess bacteriological quality. The following tests should be carried out:

Total viable count (TVC) measured at 20°C

TVC measured at 37°C

Coliform bacteria

Pseudomonas aeruginosa

Legionella (species)

Residual free chlorine reserve will be tested concurrently with bacteria sample.

Documentation will be issued to verify the process carried out on completion.

Requirements

Siting of the tank/bowser to be cleaned, clearly identified and marked Drinking or Non-Drinking water.

Information on the size of the tank/bowser and materials of construction.

Unrestricted access to and around the tank/bowser.

Offloading access for chemicals and equipment.