

COMPLETION REPORT

Client : **Global Technology and Domestic Goods Manufacturer**

Project Brief : **The Internal and External Relining of 1 No. Steel Cylindrical Fire 'Sprinkler' Tank**

Site Address : **Middlesex**

Site Contacts : **XXXXXXXX**

System Spec : **3M Scotchkote™ 165PW and 152LV**
(Formerly Known as COPON Hycote 165PW and 152LV)

Film Thickness : **1000 Microns - Internal**
500 Microns - External

Covac Supervisor : **Carl Broadley**

Completion Date : **21st January 2009**

Compiled By : **Adrian Emmett**

Covac Ref : **798**

SUMMARY OF WORKS

The Brief

1 No. Steel, cylindrical water retaining structure, sized at approximately 14.7m dia x 6m high, which had been internally painted with a Bitumen based substance, which had reached the end of its useful life due to sub-film corrosion, low film build, poor elongation properties and general deterioration.

These images show the external of the substrate.



These images show the plastic coated roof of the tank (which did not require relining) and the access hatch.

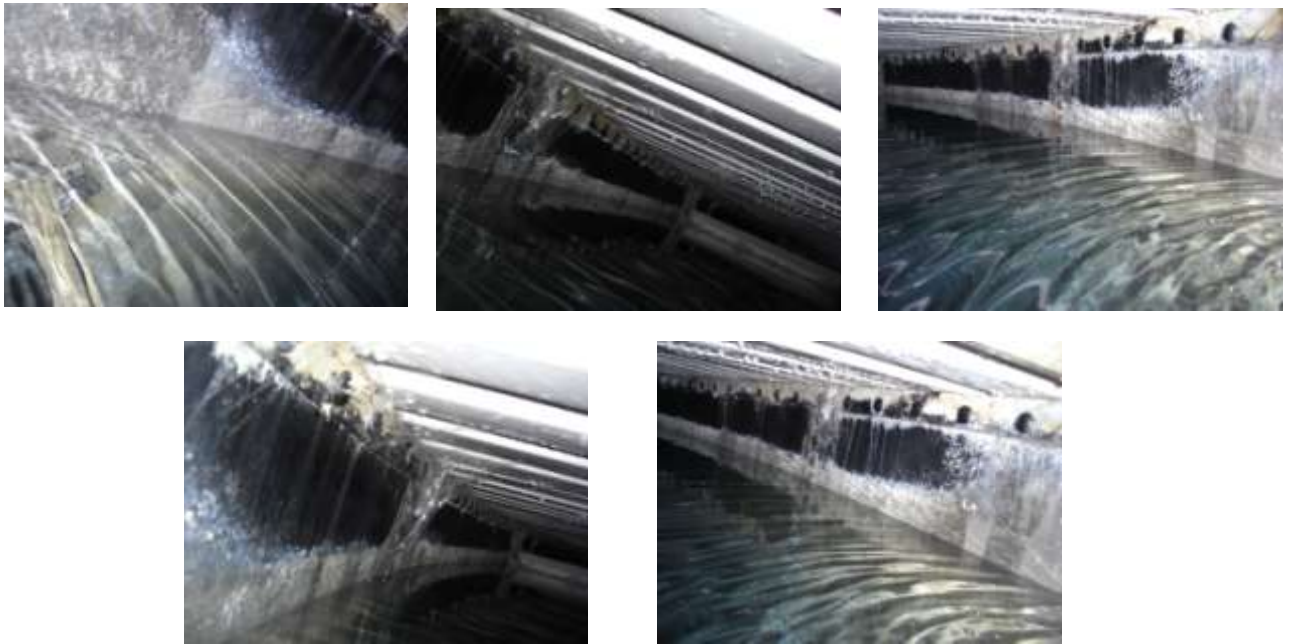


These images show the internal condition of the structure before relining. There was only Bitumen above the water line. There was not any protective coating left on the substrate below the water line, therefore, if left untreated, the internal surfaces would continue to be at risk from bacterial growth including Legionella, Pseudomonas and Biofilm; this can lead to further deterioration in the tank's surface structure and contamination of the down services with the supply of unhygienic water to the outlets.

We are all now under an obligation to ensure that water retaining structures comply with the practical guidance of ACOP L8 and subsequently, utilize products that comply with WRAS / DWI Regulations

and, therefore, maintain “the cleanliness of the system and the water in it” and avoid the “use of materials that harbour bacteria and other micro-organisms or provide nutrients for microbial growth”.

Prosecutions have been taken under the Health & Safety at Work Act 1974 and under the Control of Substances Hazardous to Health Regulations 1988. Therefore compliance is essential.



We therefore recommend the following:-

Internal

Mechanical Preparation

Brush & Roller Application– 3M Scotchkote™ 165PW

External

The Client provided safe and secure scaffolding in order that we could access all external surfaces of the substrate to be coated safely. The tank was also ‘sheeted off’ against inclement weather.

Mechanical Preparation

Brush & Roller Application - 3M Scotchkote™ 152LV



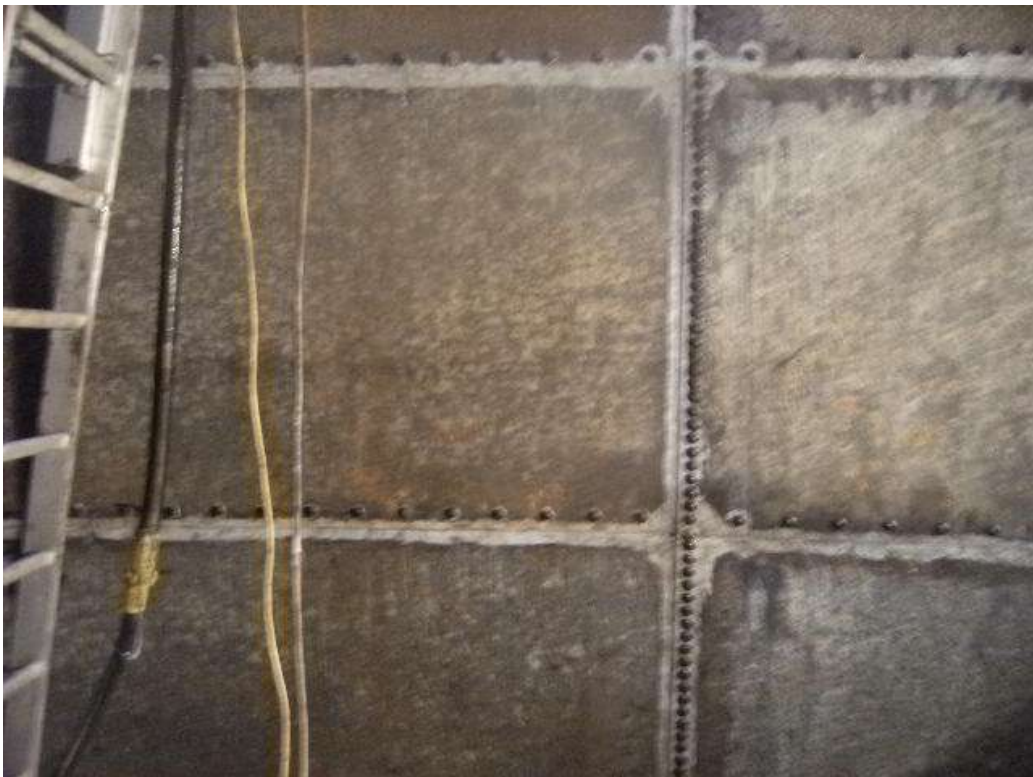
These photographs show the external of the tank prior to any work commencing.



These photographs show the structure sheeted off to protect against inclement weather and also access to the structure.



INTERNAL



These photographs show the internal surfaces of the vessel during and after being prepared by means of dry abrasive blasting equipment, by our COVAC operatives, thus raising a suitable surface profile for the adherence of the coating system.



All rivet fixings had all the surrounding mastic cut back and removed.



All seams, joints, bolts etc were initially 'stripe coated' to ensure all intricate areas were coated prior to the 1st full coat of 3M Scotchkote™ 165PW Solvent Free Polyurethane. These photographs show the steel substrate having received the 1st full coat of 3M Scotchkote™ 165PW (cream) Solvent Free Polyurethane, by means of brush and roller



The concrete floor received an application of 3M Scotchkote™ 165PW Clear Sealer by means of brush/roller to a nominal wft of 100 microns to optimise the surface bonding for the following coats, as well as satisfy the porosity of the bare concrete surface.



All intricate areas were again 'stripe coated' for a second time. The following photographs show the final application of the 2nd coat of 3M Scotchkote™ 165PW (grey) in order to achieve a total, nominal dry film thickness of 1000 Microns (1mm), and between 1500-2000 Microns (2mm) over all stripe coated areas.



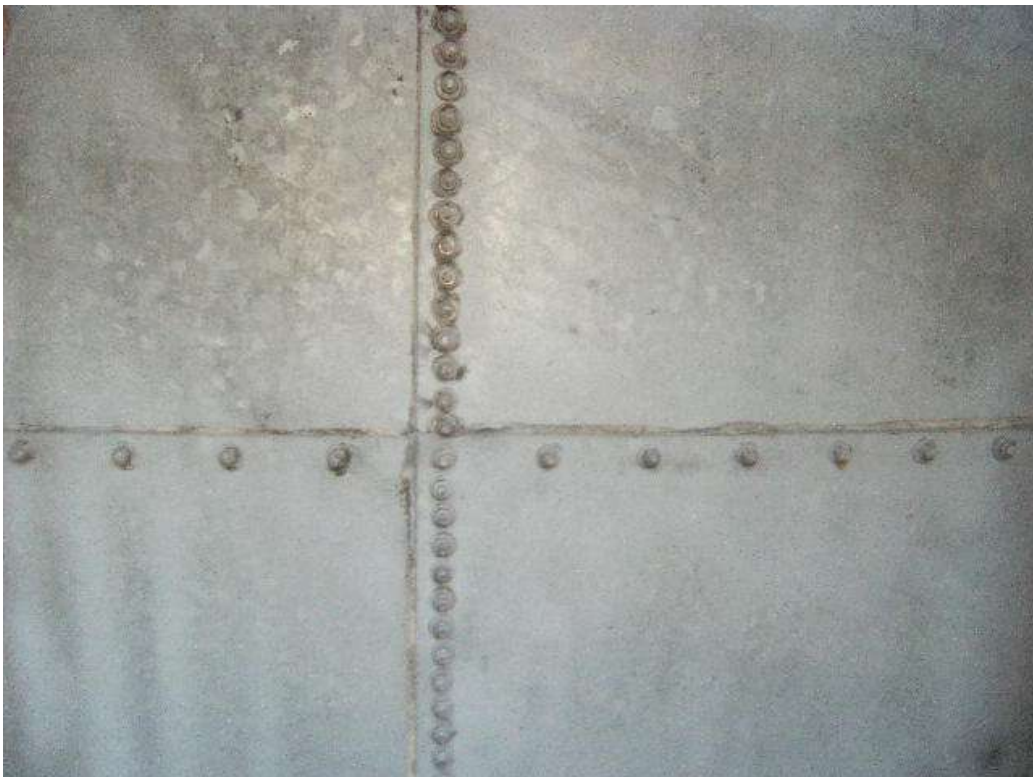




EXTERNAL



These photographs show the external substrate after being prepared by means of dry abrasive blasting equipment, by our COVAC operatives, thus raising a suitable surface profile for the adherence of the coating system.





These photographs show the external substrate having received the 1st coat of 3M Scotchkote™ 152LV.



These photographs show the external substrate having received the final coat of 3M Scotchkote™ 152LV.

