

# COMPLETION REPORT

Client : **XXXXXXXXX Property Services**

Project Brief : **The Internal Relining of 8 No. BAC Cooling Tower Sumps  
(1 No. Tower in this Sample Report)**

Site Address : **XXXXXXXXX Bank  
London**

Site Contact : **XXXXXX**

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

Film Thickness : **1000 Microns**

Covac Supervisors : **Tim Butcher / Con O'Shea**

Completion Date : **13<sup>th</sup> August 2010**

Compiled By : **Adrian Emmett**

Covac Ref : **941**

# SUMMARY OF WORKS

## The Brief

8 No. BAC Cooling Tower (Model no. VXT 600R Serial No. G00 4296) located externally in an open topped plant room on the 48<sup>th</sup> floor level and each tower's sump area is sized at approximately 5.50 x 3.00 x 2.6mtr (up to the packing) with 4no. internal fan housings. The internals of each tower sump (1no inspected) were reliant on the manufacturers original epoxy coating, which had reached the end of its useful life especially on the base of the sump floor where past high concentration dosing tablets had deteriorated the coating due to low film build, poor elongation properties leading to sub-film corrosion, leaking from the jointed panels and general deterioration to the internal substrates.

If left untreated, the internal steel substrates would be endangered with a continued risk from progressive corrosion, clogging of the filters and micro aquatic bacterial growth including Legionella, Pseudomonas and Biofilm; this can lead to further deterioration in the towers surface structure, performance and contamination of the down services with the supply and dispersion of unhygienic and potentially harmful water.

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 and therefore compliance is essential.

COVAC recommended a full internal re-lining to each of the towers sump area up to the underside of the packing area as well as coating of all reachable areas of the fan housings ensuring full compliance with current stringent water treatment regulations. On this basis, we can confidently guarantee the scope of works for a minimum of 10 years, with additional benefits of ease to regular monitoring, annual cleaning and the client's peace of mind.





# TOWER # 1





These photographs show the internal surfaces of Tower # 1, prior to relining work commencing.







**These pictures show the substrate following preparation by COVAC Operatives using Tungsten Carbide Scabblatex Units and Scrapers in accordance with ISO 8501-1:2007.**







All seams, joints, bolts etc were initially 'stripe coated' to ensure all intricate areas were coated prior to the 1<sup>st</sup> full coat of 3M Scotchkote™ 165PW Solvent Free Polyurethane.



These photographs show the substrate having received the 1<sup>st</sup> coat of 3M Scotchkote™ 165PW (cream) Solvent Free Polyurethane.





All intricate areas were again 'stripe coated' for a second time. The following photographs show the final application of the 2<sup>nd</sup> coat of 3M Scotchkote™ 165PW (grey).



