

Professional Mould Remediation of Building and Contents (to S520 Standard – ANSI IICRC Registered Firm)

Powered by  EnviroGuard PRO™ X

Site

A 600m² office building in Cairns CBD

Condition Prior to Mobilisation

- Grade 4 as per AMG 2010¹, fungal contamination to approximately 100m² of surfaces, plasterboards, and contents.
- Condition 3 as per ANSI IICRC², active fungal growth.



Methodology

- All works were completed to ANSI IICRC S520 Professional Standard for Mould Remediation. HVAC and Duct Cleaning works completed using AerisGuard products.
- Full remediation using a combination of traditional HEPA air scrubbers treated with Bioactive Filter Treatment and Enviroguard PRO X™ units and Purox™ Gel (Full list of AerisGuard™ products available on request).

Standard IICRC	AerisGuard Products
Air Scrubbers	Treated with Bioactive Filter Treatment
Containment Zone(s)	*EnviroGuard PRO™ X
Gaseous Phase and Surface Sanitisation	EnviroGuard PRO™ X & Purox™ Gel
Final Stage / PRV	EnviroGuard PRO™ X

*EnviroGuard PRO™ X units are approximately 75% of the cubic meterage air flow per hour of a traditional air scrubber.

Purox™ Gel



Through the process of controlled evaporation Purox™ Gel releases a natural and active sanitising agent into the environment, mimicking the compound generated naturally by UV sunlight. The sanitising agent actively breaks down harmful microorganisms in the air and on surfaces through a series of redox (oxidation-reduction) reactions.

1. Grade 4 - The classification concerns an indoor environment that has sustained severe mould damage that has affected the structural integrity of building contents, material such as wall and ceiling linings.
2. Condition 3 (actual growth): an indoor environment contaminated with the presence of actual mold growth and associated spores. IICRC - Institute of Inspection Cleaning and Restoration Certification

Results

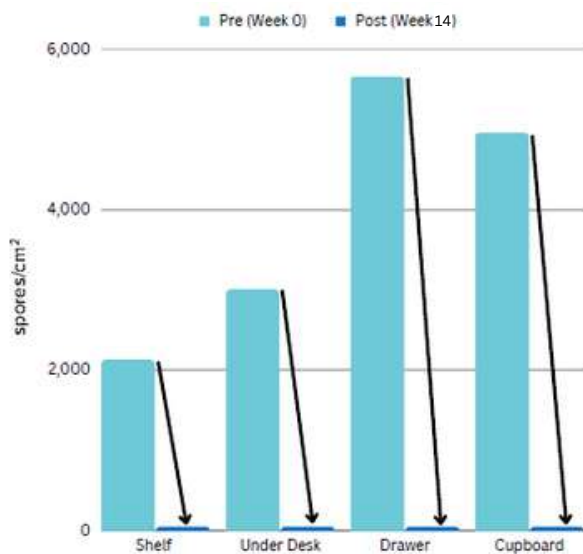
In post-remediation viable, nonviable and ATP sampling was used to confirm air and surface hygiene.

- Over 40 surfaces tested with ATP post-remediation provided an average of eight Relative Light Units (RLU).
- Over 25 air samples, all returned less than 1 mould spore (raw count / CFU).
- Over 20 surface samples - 0 mould spores and bacteria (raw count / CFU).

Viable Surface Fungi and Bacteria (Lab Report Extract)

Client Sample ID	Eurofins Sample ID	Bacteria (cfu/swab) *	Bacteria (cfu/set) *	Yeasts (cfu/swab) *	Yeasts (cfu/set) *	Mould (cfu/swab) *	Mould (cfu/set) *	Acremonium *	Alternaria *	Aspergillus *	Aspergillus brasiliensis (niger) *	Aureobasidium *	Chaetomium *	Cladosporium *	Curvularia *	Epicoccum *	Eurotium *	Fusarium *	Non-Sporulating *	Paecilomyces *	Penicillium *	
DESK (1)	23-Au0059823	<100	0	<50	0	<25	0															
LEG (2)	23-Au0059824	<100	0	<50	0	<25	0															
BACK OF DOOR (5)	23-Au0059825	<100	0	<50	0	<25	0															
DESK ROUND (8/9)	23-Au0059826	<100	0	<50	0	<25	0															
INSIDE CUPBOARD (8/9)	23-Au0059827	<100	0	<50	0	<25	0															
OFFICE	23-Au0059828	<100	0	<50	0	<25	0															
TOY CUPBOARD PLASTIC	23-Au0059829	<100	0	<50	0	<25	0															
CEILING TILE RECEPTION	23-Au0059830	<100	0	<50	0	<25	0															
CHB 13	23-Au0059831	<100	0	<50	0	<25	0															

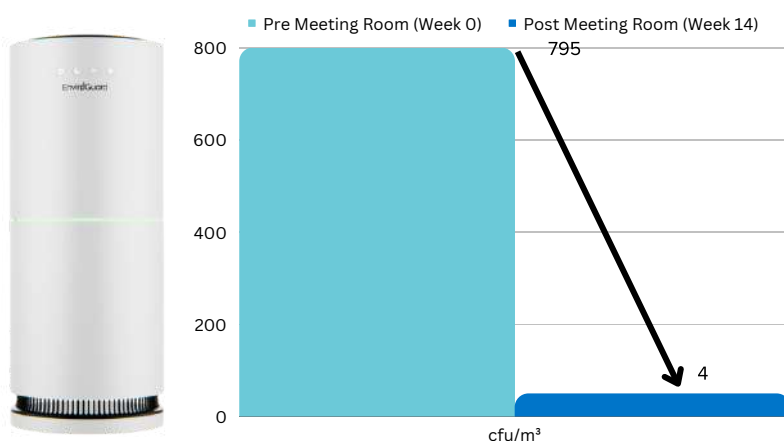
Total Surface Fungal Spore Concentrations - General Area (Multiple Surfaces)



- Week 14 post-remediation verification results were compared to initial independent sampling results.
- The total average concentration of fungal spores was zero on all surfaces.
- After eight weeks of continuous deployment viable and nonviable total surface fungal spores concentrations demonstrated the effectiveness of Purox™ Gel when used in combination with traditional remediation.

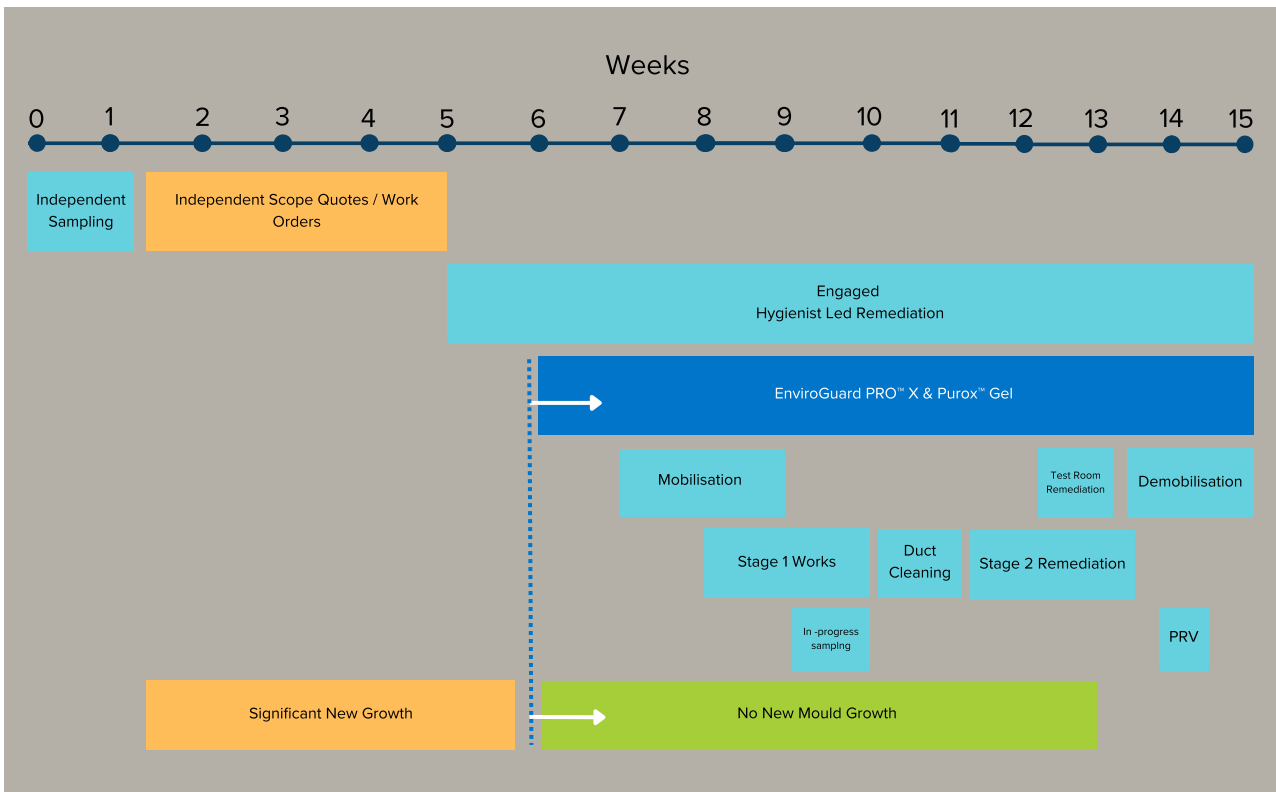
Viable Airborne Fungi - Isolated Test Room (Air)

Post Remediation, the Airborne fungal contamination in the meeting room reduced from 795 to 4 CFU/m³.



- One heavily contaminated meeting room was selected to be a trial room. The room was approximately 84m³
- EnviroGuard PRO™ X unit was active from containment to demobilisation.
- Traditional HEPA air scrubber was not used.
- Results at PRV were exceptionally low and below levels associated with traditional remediation equipment.

Project Timeline



- EnviroGuard PRO™ X's and Purox™ Gel (Boost Mode) were deployed one week prior to works commencing.
- Highly credible in-progress sampling results (see table below) indicated a significant impact directly attributable to the EnviroGuard PRO™ X unit and Purox™ Gel.
- Cost savings and time savings with reduction in grade (microbial condition) and PPE.
- At the completion of works (PRV) all data collected (ATP, Viable, Nonviable) concluded with no exception that sterilisation of the entire space had been demonstrated.
- EnviroGuard PRO™ X and Purox™ Gel controlled microbial activity, reduced further damage to contents and building, and ensured a safer and healthier indoor environment for workers.

Total Surface Fungal Spore Concentrations - In-Progress Sampling

