

CASE STUDY: AIR QUALITY – MOULD and ALLERGENS

CONTEXT

Mt Tambourine in Queensland has a warm temperate climate, a distinct wet season, a high annual rainfall of 3643.1mm and a long-term mean rainfall of 1,578.4mm. The climate is humid all-year round and the conditions are ripe for the growth of mould and allergens.

Airandé's local distributor in Queensland was approached by a Homeowner in Mt Tambourine. They were frustrated and worried about the constant appearance of with mould in their house. They were also concerned about allergens.

Study Description

Due to recent wet weather, the Homeowner had noticed a "significant amount of mould" appearing on window sills, venetian blinds, and cornices. Members of the family have developed a persistent cough.

With Airandé's guidance, and with settling plates provided by Airandé, the Homeowner undertook two Tests using the ReSPR FLEX unit.

Test Objective

The Objective of the Test was to assess the efficacy in the removal of mould and allergens by the NCC Technology that is utilised by the ReSPR FLEX unit.

The Homeowner's reports on the tests as follows:

Test 1

After the test solution was poured into petri dish, it was left uncovered for an hour before being moved into the Study. There, it was exposed for one hour. The cover was then placed back on petri dish and it was kept next to a plug in heater for 2 days to incubate.

On day two, 50 or so small white dots appeared. By day four, the dots had grown into all many and various sizes and colours, including green colonies and yellow spots with a black centre.





CASE STUDY: AIR QUALITY – MOULD and ALLERGENS

Test 2

2(a) The ReSPR FLEX was placed in the study and operated in "Normal" Mode for 36 hours.

2(b) At the end of 36 hours, a fresh solution was poured into a new, clean petri dish. There, it was left uncovered for an hour before being moved into the Study to be exposed for one hour.

The petri dish cover was then placed on the dish. It was kept next to a plug-in heater for 2 days to incubate. On day 2, no microbial contamination is in evidence, and the solution appears as clear as it was on day 1.



Post Test Observations

- 1. Neither the rainy season had ended nor had the humidity decreased.
- 2. There was no evidence of mould on the window sills, venetian blinds, and cornices.
- 3. The persistent cough experienced by family members had ceased and not returned.
- 4. The NCC Technology of the ReSPR FLEX had proven its efficacy in removing microbial contamination including moulds, spores, and allergens.



ReSPR FLEX with NCC Technology