

*A Study to Investigate the Effects of the AiroCide ACS-100 Air Cleansing System
on the Air Quality in the Cage Washing Area of a Laboratory Animal Facility.*

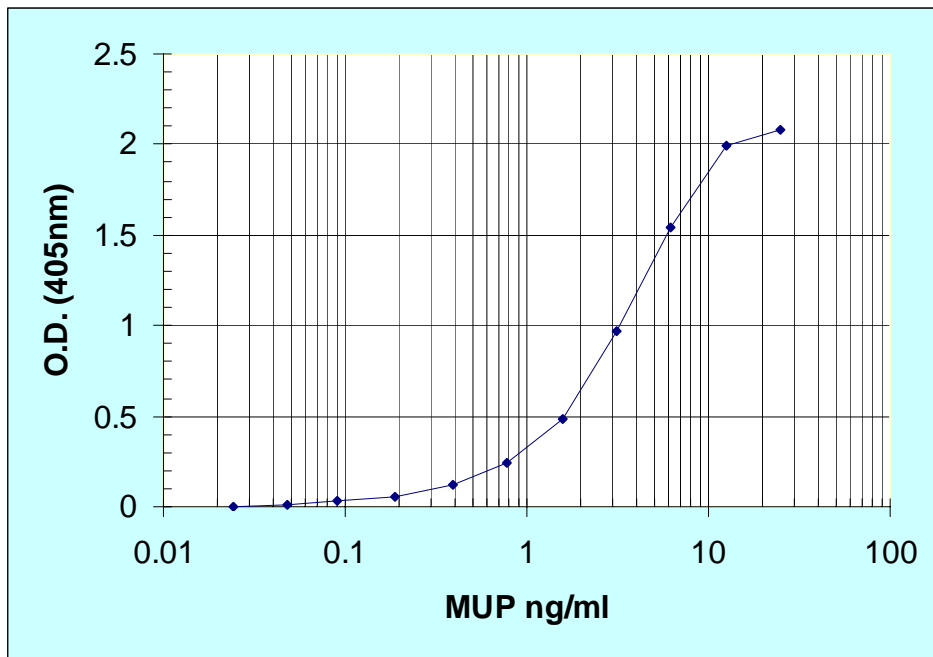
1st November 2005



**Alistair Thompson & Les Dodd
Surrey Diagnostics Limited.**

1. Air Quality Study - Allergen Screen

Standard Calibration Graph



Test Samples

| Sample | Total MUP in 2ml (ng) | MUP ng/m ³ | % change |
|--|-----------------------|-----------------------|----------------------------|
| Before AiroCide (7 day baseline) | 192 | 88.89 | |
| AiroCide On (after 7 days operational) | 16 | 7.41 | -91.7 % DECREASE |
| AiroCide Off (after 5 days off) | 29 | 13.3 | +80.0 % INCREASE |

2. Air Quality Study - Microbiology Screen

Test Samples

| Sample | Total Viable Count (1000 litres) | % change |
|---|-------------------------------------|----------------------------|
| Before AiroCide (7 day baseline) | 140 | |
| AiroCide On (after 7 days operational) | 75 | -53.6 % DECREASE |
| AiroCide Off (after 5 days off) | 117 | +64.1 % INCREASE |

3. Imperial College, Hammersmith Air Quality Study - Ammonia Screen

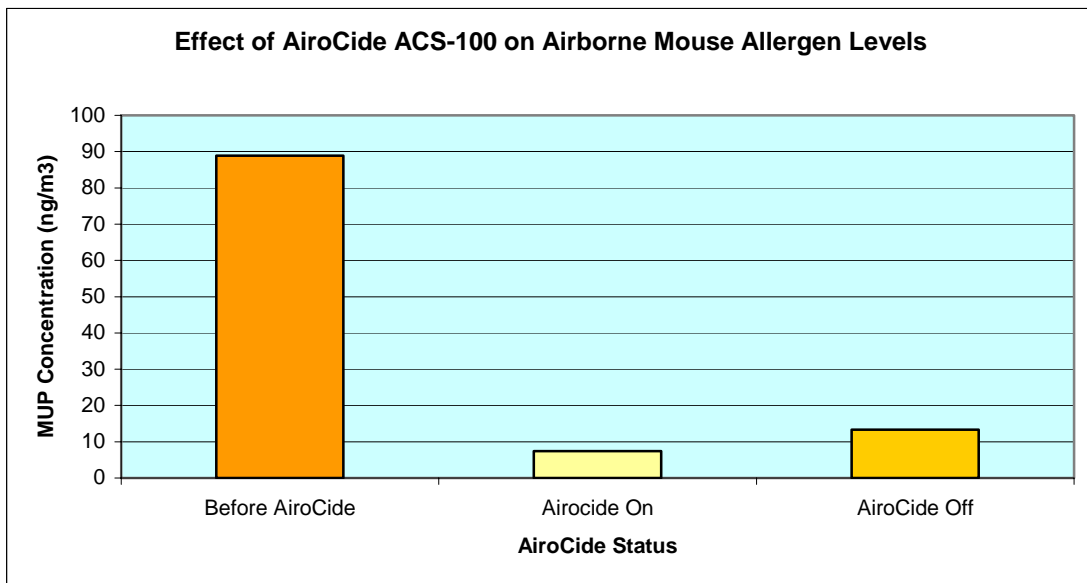
Test Samples

| Sample | Ammonia Concentration (ppm) | % change |
|---|--------------------------------|------------------|
| Before AiroCide (7 day baseline) | <2 | |
| AiroCide On (after 7 days operational) | <2 | NO CHANGE |
| AiroCide Off (after 5 days off) | <2 | NO CHANGE |

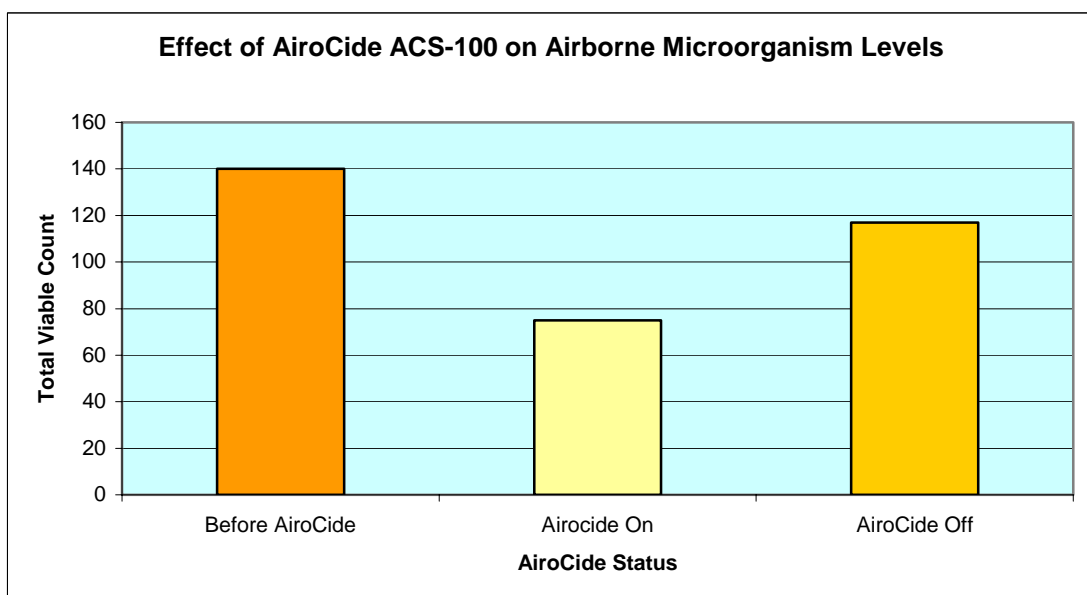
Ammonia concentrations too low to be measured.

4. Air Quality Study - Summary

Allergens



Microbiology



Ammonia

Levels were too low to be measured (<2 ppm). Ammonia is detectable by smell at 8 ppm and causes respiratory and eye irritation at 25 ppm.

5. Air Quality Study - Conclusions

Allergens

The MUP allergen levels in the cage washing area were seen to decrease by over 90% when the AiroCide system was turned on and allowed to clean the air for 7 days. This represents a significant reduction in LAA risk to staff working in this area. 5 days after the AiroCide had been turned off it can be seen that allergen levels were rising again.

Microbiology

There is a clear reduction in airborne organisms when the AiroCide is operational. Due to the continuous action of the AiroCide, the levels would be reduced even further if the system were running for longer than the 7 days of the trial. The levels were seen to quickly rise again once the system was turned off.

Ammonia

No information can be gained from this part of the study due to the low baseline ammonia levels in this area. The AiroCide has been shown, in other studies, to reduce high ammonia levels within hours.