

Dear list members,

AFM Active Filter Media for sand filters

Bacterial levels on sand and AFM, and asthma link to swimming pools

One of the main reasons for developing AFM as a replacement media for silica sand, was to eliminate the problem due to bacterial contamination of sand in sand filters. Bacterial fouling is a serious problem for filters used for the treatment of biologically active water such as drinking water supplies and wastewater treatment system. However we had not fully appreciated the implications of biofouling of sand used by the swimming pool industry.

We had expected that swimming pool water sand filters would be essentially sterile. However we soon found out that this was not the case.

Recent tests conducted by Jonkers Filtration in New Zealand, confirmed that a few grams of sand contained as many as 3,600,000 bacteria, while AFM contained less than 1. A swimming pool filtered using AFM will use half to a quarter of the amount of chlorine as a pool using sand. This result means that water will be much cleaner in an AFM pool, and the level of chlorine compounds will also be much lower.

Extensive research has been conducted over the last four years by leading European scientists concerning the link between chlorine compounds and respiratory disease such as asthma among children. There appears to be a link between attendance at swimming pools and serious respiratory disorders. The European Respiratory Congress will be held in Glasgow Sept 2004 for 16,000 scientists and doctors throughout Europe. Three of the papers will be presented relating swimming pools and respiratory disorders. Details of the respiratory symposium are available from <http://www.ersnet.org/ers/>

Dryden Aqua is now conducting research in the levels of bacteria and volatile toxic chlorine compounds. The good news is that our results so far confirm that AFM makes a major improvement not only to water quality but air quality in swimming pools.

[Report on level of bacteria on sand and AFM](#)

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