

July 21, 2005

John Hayman  
President, KeAir Technologies LLC  
3625 Kennesaw North Ind. Pkwy.  
Kennesaw, GA 30144

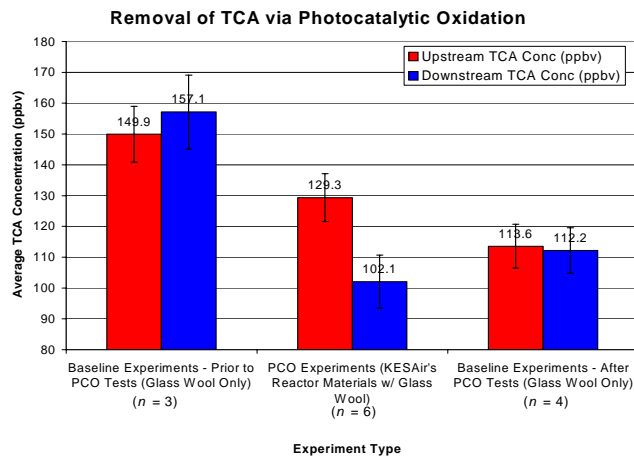
RE: Performance of AiroCide Reactor in Treatment of Gaseous 2,4,6-trichloroanisole

Dear Mr. Hayman,

Find below the results from testing AiroCide reactor (KesAir Technologies LLC, Kennesaw, GA) as a technology for removing (via photocatalytic oxidation - PCO) gaseous 2,4,6-trichloroanisole (TCA) from a feed stream of air passing through the device.

**EXECUTIVE SUMMARY**

A benchtop PCO reactor with operating conditions similar to that commercialized by KesAir was tested for the ability of it to remove TCA gas from a feed stream containing an initial concentration (79 – 286 ppbv) of TCA (in a balance of ultra-pure air). Figure 1 contains the average gaseous TCA concentration upstream and downstream of the PCO reactor for two sets of baseline test conditions where no active materials were present and one set of test conditions where KesAir's active materials were present. From these data, the PCO materials within the KesAir AiroCide is capable of removing up to 50% of TCA in a single pass through KesAir's AiroCide Model 100.



**Figure 1.** Single-pass conversion (i.e., removal) of TCA gas from a feed stream passed through active materials in an AiroCide of KesAir. (*n* is the number of independent experiments used to determine the average TCA concentrations shown. Error bars with one standard deviation are shown.)

*Dean Tompkins*

Dean T. Tompkins, PhD, PE

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Date