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Michael Jones
Greene Environmental Coalition
PO. Box 266
Yellow Springs, OH 45387

Dear Mr. Jones;

As you requested in your letter of June 16, 1993, I have reviewed Joe Thornton's evaluation of the Dioxin Risk calculation performed by Clement Associates for Southwestern Portland Cement Co. in Fairborn.

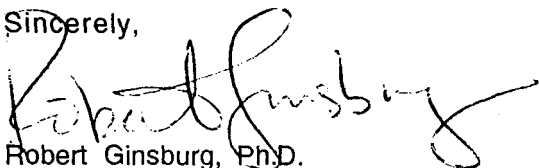
In reviewing both analyses, the most obvious point is that risk assessment is not a particularly useful tool for evaluating incinerator emissions. In particular the choice of assumptions can legitimately vary by a factor of more than a million. Such variation prevents any reliance on the absolute value of risk assessment calculation as an indicator of hazard or public health concern. The variation also prevents use of the results of risk assessment calculation for comparison of relative risk because the assumptions used in each calculation are not the same or likely to be comparable.

Clement chose to use various factors (for deposition rate, average consumption values, cancer slope, etc.) that have been published but are different than the factors used by USEPA in its most recent risk assessment calculations or those contained in the recent dioxin toxicity review. Some of the factors chosen by Clement Associates are somewhat dated (e.g. the 1984 calculation of the cancer slope factor by Kimbrough et al) and they do not appear to have incorporated any results from the recent USEPA review of dioxin toxicity.

Joe Thornton correctly points out the assumptions more recently employed by USEPA and correctly uses those values to indicate the extremely conservative choices made by Clement Associates. Clement has made a consistent choice of factors leading to lower risk values. This limits the validity or usefulness of their calculation in comparing the results to risk values calculated by USEPA or any other agency. Thornton's conclusion that use of USEPA and other values in the risk assessment would indicate a substantially higher risk from the facility is scientifically valid and is more comparable to risk assessments published by other governmental agencies.

I hope these comments are useful. Please call if there is some other way I can be of assistance.

Sincerely,



Robert Ginsburg, Ph.D.
Environmental Health Consultant