

Attachment #2:

Statement from Dr. Neil Carman, September 4, 2009, via e-mail. Excerpted from WVCWA comments to EPA Docket ID No. EPA-HQ-OAR-2002-0051

"I am a former regional field investigator inspecting industrial plants including Portland cement kilns for the State of Texas air pollution control agency from 1980 to 1992. . . .

When I zoomed down at the Lehigh Southwest Cement Company plant on the Google Earth satellite map, I was surprised to observe that there is no central exhaust stack which collects the kiln's waste gases and particulate matter emissions. Instead one can see that there is a baghouse with 32 separate waste gas exhaust vents. In my opinion, this makes it quite difficult to nearly impossible to adequately monitor 100% of the kiln's gaseous and particulate matter emissions and take representative samples from 32 separate vents. According to the technical information conveyed to me indirectly from a Mr. Brian Bateman at the BAAQMD in San Francisco, I learned that the BAAQMD extrapolates the total emissions from the kiln with the only CEMS it currently has for NOx, SO2 and other CEMS on a single vent to all the 30 vents that are in operation at one time. The air district in an email claimed that all the vents are supposed to be identical in size, design, process flow and operation. However, I find this claim challenging, in my opinion, because the large number of baghouse vents would likely have subtle operational differences over time due to several sources of variability such as differential wear and tear in the bags themselves differentially increasing the flow rate in one or more vents compared to others with less wear and tear in the bags (no two bags are absolutely identical as they undergo wear and tear over time), and therefore the potential sources of variability within the 30 different baghouse vents makes any such claim not credible nor supportable.

There could be various configurations inside the baghouse (a primitive method at best for reducing air emissions) in which the air moves from the two separate pipe/ducts which bring the emissions into the bag house. Whatever the particular configuration it is not possible that the air moves at the same rate and at the same distance from the intake pipes to each of the 32 separate vents.

In addition, at any time, there will be differences in the amount of dust in each bag and thus the amount and particulars of the emissions from any of the 32 vents, or 30 vents which are used at one time while the other two have their bags shaken or changed."