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Dear Dr. Kleinman,

I am writing you regarding your current service as Chairman of the Scientific Review Panel (SRP) on Toxic Air Contaminants (TAC). I was the lead plaintiff in the June 2009 Pacific Legal Foundation lawsuit, *Brown v. Adams*, which challenged the illegal composition of the SRP as it existed in 2009. As a result of this lawsuit five of the nine members of the SRP were removed in 2010, including long-term Chairman John R. Froines. You were nominated by then UC President Mark G. Yudof and selected by Assembly Speaker John Perez to replace Dr. Froines as SRP Chairman, at least for about two months, until Dr. Froines was reappointed. You were then nominated by UC President Janet Napolitano to replace Dr. Froines after he resigned from the SRP as of August 1, 2013. You were again selected by Speaker Perez to be the SRP Chairman.

I understand that you are a protégé of Dr. Froines and have co-authored several diesel-related papers with him. Also, I understand that you are familiar with the actions of the SRP, particularly its 1998 identification of diesel particulate matter (PM) as a TAC. Finally, I understand that you are one of the originators of the concept of “premature deaths” due to air pollution. I have read your 1992 *SCIENCE* article “Valuing the Health Benefits of Clean Air”. Your article states that each resident in Southern California “faces an increased risk of death in any year of 1/10,000 as a result of elevated PM10 exposure” and that “attaining air pollution standards may save 1600 lives a year in the region.”

Although I have read this study several times, I cannot find any reference to the biological plausibility of premature death from “particle size”, the level of toxicity required or the Relative Risk (RR) resulting in premature deaths. As a toxicologist, you know that the “dose makes the poison”. Without defining the RR, you cannot determine whether you have actual evidence or just statistical noise generated from the epidemiological studies used. Your article suggests we can prevent 1600 deaths without showing evidence of even ONE person dying from PM10

exposure. Since the publication of your article, epidemiologic evidence assembled by EPA shows that there is no significant relationship between PM10 and premature death.

CARB now claims that PM2.5, the supposedly more deadly form of PM, contributes to 18,000 premature California deaths per year. This claim is based on a few specially selected non-California studies that rest on RR's of around 1.01-1.08 (where 1.0 equals no effect). However, the totality of the epidemiologic evidence published since the year 2000 by 26 doctoral level scientists shows NO RELATIONSHIP between PM2.5 and total mortality in California. Unfortunately the overall evidence is ignored by CARB.

Observational studies must show a strong Relative Risk or Hazard Ratio in order to suggest causation because they are not randomized or controlled and subject to many confounders. Extensive research by the Observational Medical Outcomes Partnership strongly suggests a RR of 3-5 to reduce the uncertainties created by these confounders. Under the Federal *Reference Manual on Scientific Evidence*, Chapter on Epidemiology (written by Leon Gordis, an internationally known epidemiologist with two equally prominent co-authors, Mical Freedman and Michael Greene) on page 384 they describe proof of causation of disease or death must, as a **minimum**, have a relative risk (RR) of 2 (100% increase in effect). [*Reference Manual on Scientific Evidence*, pages 375-384 (2nd edition, Federal Judicial Center, 2000)].

Let us examine some simple statistics associated with PM2.5 that are relevant to the plausibility that it "causes" premature death. The amount of air inhaled by an adult breathing at rest is about 10 cubic meters per day or about 300 million cubic meters over an 80-year life span. The amount of PM2.5 inhaled at the approximate current ambient level in California of 15 $\mu\text{g}/\text{m}^3$ is about 4.5 grams in 80 years. The amount of inhaled diesel PM, based on evidence that it is 5% of total PM2.5, is about 0.2 grams in 80 years, which is the amount of PM2.5 that is inhaled from smoking about five cigarettes. Based on just common sense, these low levels of inhaled PM2.5 from diesel engines are not sufficient to kill anyone in California. I have been exposed to PM2.5 from diesel equipment my entire life and I am still in good health. I conclude that your (and CARB's) studies amount to nothing more than statistical noise!

Even more troubling is the fact that the SRP has continually refused to reconsider its 1998 identification, in spite of overwhelming evidence that there are no "premature deaths" in California due to diesel PM, that diesel PM represents only a tiny portion of the total PM2.5 in California, that the 1998 identification was based on highly contested evidence that did not apply to California, and that most SRP members were serving improperly/illegally when the 1998 identification was made.

The SRP is of great concern to me because the CARB diesel regulations that have resulted from the 1998 diesel PM TAC identification have destroyed most the net worth of all the retained diesel equipment that my family construction company has been legally purchasing since 1943. My diesel assets have become diesel liabilities. The SRP and CARB has summarily taken away my retirement, and at the age just shy of 71, I find this extremely offensive. As the CARB

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requirements become mandatory, I will liquidate my assets, taking the employees off the payroll one at a time until I close the doors. The economy just does not support replacement of my entire fleet. All due to flawed studies, yours included.

Because of these factors, California businessmen like myself we have been carefully watching the SRP to make sure that it strictly adheres to California Health and Safety Code Sections 39660-39671. The February 2010 nomination letter of President Yudof describes you as a Professor at UC Irvine, whereas other reliable information states that you were an Adjunct Professor at UC Irvine from 1982 through 2010. Additional reliable information indicates that since 2011 you have not been employed at UC Irvine as a Professor or Adjunct Professor and are currently employed as a "recalled non-faculty academic."

However, as of today, you are listed as a Professor on the CARB SRP webpage and on the UC Irvine AirUCI web page. Thus, to clarify these inconsistent facts, I request that you promptly send me evidence that you in fact have been employed as a Professor at UC Irvine since 2010. If you have not been employed at UC Irvine since 2010 as a Professor then I assume that you misrepresented your actual faculty position on your two SRP applications to the UC President. If these misrepresentations actually occurred, I request that you resign from the SRP no later than January 1, 2015, when your current SRP appointment expires. If you apply for another term on the SRP, I make every effort to stop your reappointment based on that fact that you provided false information to the UC President regarding the description of your UC Irvine faculty appointment.

Thank you very much for your prompt attention to this important matter.

Sincerely yours,



Norman R. Brown
Owner