August 8, 2016

Utah State Legislators Salt Lake City, Utah (sent via email)

Re: BYU Professor Pope and the \$38.2 Billion Question

Dear Utah State Legislators,

I am an environmental epidemiologist and physicist who has had a long academic career at UCLA and I am an expert on the health effects of air pollution in California. I am writing to you because research findings and claims that fine particulate matter (PM2.5) *causes* premature deaths by Brigham Young University Professor of Economics C. Arden Pope, III, are being used by the South Coast Air Quality Management District (SCAQMD) to justify proposed new \$38.2 billion air pollution regulations in Southern California. However, the scientific validity of Dr. Pope's findings has been continuously challenged since they were first published in 1995. Recently a very strong case has been made by nine accomplished experts, including myself, that "Particulate Matter Does Not *Cause* Premature Deaths"

(https://www.nas.org/articles/nas_letter). In addition, there is overwhelming evidence from over a dozen sources, including both Dr. Pope and me, that PM2.5 is NOT related to total mortality in California (http://scientificintegrityinstitute.org/NoPMDeaths112215.pdf). Finally, in a June 12, 2013 letter to EPA, Congressmen Lamar Smith and Chris Stewart described the urgent need for transparency and reproducibility regarding Dr. Pope's research findings and they (unsuccessfully) requested the underlying data for his 1995, 2002, 2005, 2009, and 2009 research papers.

Since Dr. Pope is widely regarded as "The World's Leading Expert on the Effects of Air Pollution on Health," and since his extensive advice to CARB and SCAQMD is taken very seriously, I now ask Dr. Pope for a YES or NO answer to the following question: "In light of the above challenges to your PM2.5-mortality findings, do you support the way that the SCAQMD has used three studies co-authored by you (Jerrett et al. 2005, Krewski et al. 2009, and Jerrett et al. 2013) to calculate their 'Preliminary Health Impacts – Mortality', knowing that that these preliminary mortality impacts are the primary public health justification for a Draft 2016 Air Quality Management Plan (AQMP) that will impose an estimated \$38.2 billion in compliance costs on the South Coast Air Basin economy?" The July 28, 2016 SCAQMD tables containing the preliminary mortality impacts and the preliminary AQMP costs are attached to this letter, with full details available at this weblink (http://www.aqmd.gov/home/library/meeting-agendasminutes/agenda?title=STMPRSocio_072816). A table summarizing all studies of PM2.5 and total mortality in California, with the 2005, 2009, and 2013 studies highlighted in red, is also attached. Relative risk of unity (RR = 1.00) means no relationship between PM2.5 and mortality. Finally, the 2013 letter by Congressmen Smith and Stewart is attached. Because his findings will be discussed at an SCAQMD AQMP meeting next week, I request an answer from Dr. Pope by August 15, 2016. Until I receive a response to the contrary, I will assume that his answer to my question is YES. If you have the time to examine this matter, I request that you send your own answer to the above question to me (jenstrom@ucla.edu) and/or to SCAQMD (aqmp@aqmd.gov). Please let me know if you would like to discuss any aspect of this request with me.

Thank you very much for your consideration of this important matter.

Sincerely yours,

James E. Enstrom

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