From: **USC Provost** <uscprovost@usc.edu> Date: Fri, Feb 15, 2019 at 4:23 PM Subject: RE: Request to Discuss USC Professors and SCAQMD Regulations To: JAMES E ENSTROM <jenstrom@ucla.edu> Cc: Presidents Office <president@usc.edu>

Dear Dr. Enstrom,

Thank you for reaching out again. I appreciate your thoughts. I wish I had the time to discuss this matter further with you and our colleagues here in the Department of Preventive Medicine. Unfortunately, my schedule is incredibly tight. I will not be able to take a phone call or meet with you. However, I continue to support your right to advocate for your findings, just as I support our faculty and others to do the same.

I wish you well in your research.

Sincerely,

Michael W. Quick, Ph.D. Provost and Senior Vice President for Academic Affairs Shelly and Ofer Nemirovsky Provost's Chair University of Southern California 3551 Trousdale Parkway, ADM 102 Los Angeles CA 90089-4019 (phone) 213.740.2101 uscprovost@usc.edu

From: JAMES E ENSTROM <jenstrom@ucla.edu>
Sent: Thursday, February 14, 2019 12:45 PM
To: USC Provost <uscprovost@usc.edu>
Cc: Presidents Office <president@usc.edu>
Subject: Request to Discuss USC Professors and SCAQMD Regulations

February 14, 2019

USC Provost Michael W. Quick uscprovost@usc.edu

Dear Provost Quick,

I greatly appreciate your response to my February 13, 2019 email message. I request the opportunity to speak with you in person or on the telephone regarding the issues described in my email message. These issues are directly relevant to academic freedom and scientific integrity at both USC and UCLA and to the Southern California economy.

Thank you very much for your consideration.

Sincerely yours,

James E. Enstrom, PhD, MPH, FFACE jenstrom@ucla.edu (310) 474-4274

From: USC Provost <<u>uscprovost@usc.edu</u>>
Date: February 14, 2019 at 10:25:45 AM PST
To: "James E. Enstrom" <<u>jenstrom@ucla.edu</u>>, Presidents Office <<u>president@usc.edu</u>>
Cc: Duncan Campbell Thomas <<u>dthomas@usc.edu</u>>, "Kiros T. Berhane" <<u>kiros@usc.edu</u>>, Edward Lawrence Avol <<u>avol@usc.edu</u>>, William Gauderman <<u>jimg@usc.edu</u>>, "Frank D. Gilliland"
<<u>gillilan@usc.edu</u>>, Rob Scot McConnell <<u>rmcconne@usc.edu</u>>, Constantinos Sioutas
<<u>sioutas@usc.edu</u>>, "'Andrea M. Hricko''' <<u>jfroines@ucla.edu</u>>
Subject: RE: USC Professors Support SCAQMD and Costly Unjustified Regulations

Dear Dr. Enstrom,

Thank you for your email dated February 13, 2019. As academic colleagues of yours, President Austin and I respect your career and value your PM2.5 research. We support and encourage your right to speak out in defense of your findings. We also support and encourage our faculty and others to express their views as well.

We wish you the best as you continue your research.

Sincerely,

Michael W. Quick, Ph.D. Provost and Senior Vice President for Academic Affairs Shelly and Ofer Nemirovsky Provost's Chair University of Southern California 3551 Trousdale Parkway, ADM 102 Los Angeles CA 90089-4019 (phone) 213.740.2101 uscprovost@usc.edu From: James E. Enstrom <<u>jenstrom@ucla.edu</u>>
Sent: Wednesday, February 13, 2019 3:56 PM
To: Presidents Office <<u>president@usc.edu</u>>
Cc: USC Provost <<u>uscprovost@usc.edu</u>>; Duncan Campbell Thomas <<u>dthomas@usc.edu</u>>; Kiros T.
Berhane <<u>kiros@usc.edu</u>>; Edward Lawrence Avol <<u>avol@usc.edu</u>>; William Gauderman
<<u>jimg@usc.edu</u>>; Frank D. Gilliland <<u>gillilan@usc.edu</u>>; Rob Scot McConnell <<u>rmcconne@usc.edu</u>>;
Constantinos Sioutas <<u>sioutas@usc.edu</u>>; 'Andrea M. Hricko' <<u>jfroines@ucla.edu</u>>
Subject: USC Professors Support SCAQMD and Costly Unjustified Regulations

February 13, 2019

Interim President Wanda M. Austin president@usc.edu Provost Michael W. Quick uscprovost@usc.edu University of Southern California Los Angeles, CA 90089

Re: USC Professors Support SCAQMD and Costly Unjustified Regulations

Dear President Austin and Provost Quick,

I am an accomplished epidemiologist who has had a long academic career at UCLA. In particular, I am an expert on air pollution health effects in California. Since 2005 I have published strong evidence that fine particulate matter (PM2.5) is NOT harmful to Californians and that multi-billion-dollar CARB and SCAQMD PM2.5 regulations are NOT justified. On January 30, 2017 I submitted very detailed null evidence to SCAQMD showing that there is NO scientific, public health, or economic justification for the costly new SCAQMD PM2.5 regulations contained in their 2016 Air Quality Management Plan (http://scientificintegrityinstitute.org/GhoshAll013017.pdf).

However, instead of engaging in a professional dialog in order to understand my detailed null evidence, key USC professors simply ignore it and continued to support SCAQMD and its regulations. For example, twelve USC Preventive Medicine professors signed a March 4, 2016 SCAQMD support letter (https://junkscience.com/2016/09/university-of-california-profs-demand-continuation-of-air-pollution-gravy-train/). The September 5, 2016 JunkScience analysis of these USC professors reveals that seven of them have received at least \$268 million in air pollution research funding from EPA and NIEHS. I believe that this massive amount of research funding has influenced their research findings and their continuing support for SCAQMD regulations. My belief is reinforced by USC Preventive Medicine Professors Duncan C. Thomas and Kiros T. Berhane, who have failed to respond to my January 3, 2019 and June 27, 2018 email messages shown below. These messages summarize the latest epidemiologic evidence that PM2.5 does not cause premature deaths and that there is NO justification for new SCAQMD regulations.

We are now at a critical point where all Southern California taxpayers may be forced to comply with new unjustified SCAQMD regulations that are paid for with the a one-half-cent sales tax being promoted by SCAQMD (<u>http://www.dailybulletin.com/aqmd-considers-seeking-a-one-half-cent-sales-tax-in-four-counties-for-clean-air-programs</u>). If a new regressive sales tax is approved, it will hurt every Southern California taxpayer, particularly the struggling blue collar workers who surround the two USC campuses.

Thus, I request the opportunity to discuss the above issues with you or an appropriate person within your offices. I have copied the relevant USC Preventive Medicine Professors with the hope that they will finally examine and understand my null evidence and publicly oppose the proposed SCAQMD sales tax.

Thank you very much for your consideration.

Sincerely yours,

James E. Enstrom, PhD, MPH, FFACE UCLA and Scientific Integrity Institute <u>http://www.scientificintegrityinstitute.org/</u> jenstrom@ucla.edu (310) 472-4274

cc: Duncan C. Thomas <<u>dthomas@usc.edu</u>> Kiros T. Berhane <<u>kiros@usc.edu</u>> Edward S. Avol <<u>avol@usc.edu</u>> W. James Gauderman <<u>jimg@usc.edu</u>> Frank D. Gilliland <<u>gillilan@usc.edu</u>> Rob S. McConnell <<u>rmcconne@usc.edu</u>> Constantinos Sioutas <<u>sioutas@usc.edu</u>> Andrea M. Hricko <<u>jfroines@ucla.edu</u>>

From: James E. Enstrom <<u>jenstrom@ucla.edu</u>> Date: Thu, Jan 3, 2019 at 10:44 AM Subject: Request to Assess Evidence of NO PM2.5 Deaths in US To: Duncan C. Thomas <<u>dthomas@usc.edu</u>> Cc: Kiros T. Berhane <<u>kiros@usc.edu</u>>

January 3, 2019

Duncan C. Thomas, PhD Department of Preventive Medicine USC School of Medicine <u>dthomas@usc.edu</u>

Re: Request to Assess Evidence of NO PM2.5 Deaths in US

Dear Dr. Thomas,

I request that you ask Dr. Berhane to respond to my unanswered June 27, 2018 email message regarding my overwhelming evidence of NO PM2.5 Deaths in the US. On October 1, 2018, I presented six sources of null evidence to the PM2.5 Working Group in Washington, DC

(<u>http://www.scientificintegrityinstitute.org/PM25WGJEE100118.pdf</u>). If Dr. Berhane continues to refuse to reply, then I request your assessment of this evidence. This request is important because the multi-billion-dollar PM2.5 regulations imposed upon Californians by EPA, CARB, SCAQMD, and SJVAPCD are

scientifically and economically unjustified. USC professors have played a major role in the research and interpretation of evidence that has led to these unjustified regulations. If I receive no response from you or Dr. Berhane, then I will assume that your unwillingness to address unethical PM2.5 science and regulations is consistent with the recent lack of ethics at the USC School of Medicine (https://www.latimes.com/local/lanow/la-me-usc-dean-harassment-20171005-story.html).

Thank you very much for your serious consideration of my serious request.

Sincerely yours,

James E. Enstrom, PhD, MPH, FFACE Current EPA SAB Candidate UCLA and Scientific Integrity Institute jenstrom@ucla.edu (310) 472-4274

Subject:FW: Request to Examine Enstrom Evidence of NO PM2.5 Deaths in USDate:Wed, 27 Jun 2018 14:00:38 -0700From:James E. Enstrom <i stron@ucla.edu</th>To:'Kiros T. Berhane' <kiros@usc.edu</th>

June 27, 2018

Kiros T. Berhane, PhD USC Department of Preventive Medicine HEI Review Committee kiros@usc.edu

Dear Dr. Berhane,

Dr. Steven N. Goodman, Co-Director of METRICS, has declined my June 13, 2018 request below to have METRICS examine my strong evidence of NO PM2.5 deaths in the US, in spite of the fact that he spoke at the April 30, 2018 HEI Session "Can We Rely on Environmental Health Research?" Since you co-chaired this HEI Session and have extensive expertise in air pollution biostatistics and epidemiology, I request that you examine my evidence, as explained below and in the two attachments. Please let me know if there is a convenient time when we can discuss this evidence via telephone.

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

Sincerely yours,

James E. Enstrom, PhD, MPH, FFACE UCLA and Scientific Integrity Institute jenstrom@ucla.edu (310) 472-4274 From: James E. Enstrom <<u>jenstrom@ucla.edu</u>>
Sent: Wednesday, June 13, 2018 12:11 PM
To: 'Steven N. Goodman' <<u>steve.goodman@stanford.edu</u>>
Subject: Request to Examine Enstrom Evidence of NO PM2.5 Deaths in US

June 13, 2018

Steven N. Goodman, MD, PhD Co-Director, METRICS <u>steve.goodman@stanford.edu</u>

Dear Dr. Goodman,

I am writing as a follow-up to my telephone call Tuesday afternoon regarding your April 30, 2018 HEI Presentation "What Does Research Reproducibility Mean?" Your Slide 3 shows that the first "Criteria for reproducible epidemiologic research" is "Analytical data set is available." As explained in my attached March 28, 2017 Dose-Response article, I obtained an analytical data set for the ACS CPS II cohort and showed that there is NO robust relationship between PM2.5 and total mortality in the CPS II cohort. My findings challenge the validity of the 1995 AJRCCM Pope article, the 2000 HEI Reanalysis Report, and the 2009 HEI Research Report 140, as described in the attachment. The April 30, 2018 HEI Presentation by Richard T. Burnett "Particulate Matter Reproducibility and Air Pollution Epidemiology" OMITS all reference to my Dose-Response article and other relevant research since 2005. His Slide 12 deliberately exaggerates the relationship between PM2.5 and total mortality in the US. My second attachment presents my reanalysis of Burnett's Slide 12 and shows that there is NO current relationship between PM2.5 and total mortality in the US. I want to present my Dose-Response article to HEI staff and affiliates, but HEI will not allow me to do so.

All of this casts doubt upon the reliability of air pollution epidemiology which has been used to establish EPA regulations. Please make a preliminary assessment of my attachments, both of which are relevant to the proposed EPA Rule "Strengthening Transparency in Regulatory Science." Hopefully, a METRICS Team Member can examine these attachments in detail and give me their assessment.

Thank you very much for your consideration and assistance.

Sincerely yours,

James E. Enstrom, PhD, MPH, FFACE UCLA and Scientific Integrity Institute jenstrom@ucla.edu (310) 472-4274 Date: Thu, 03 Jul 2014 16:22:41 -0700 To: Duncan Campbell Thomas <dthomas@usc.edu> From: "James E. Enstrom" <jenstrom@ucla.edu> Subject: Enstrom Explanation of Secret Science Reform Act Cc: Stan Young <young@niss.org>

Thank you for responding to me and asking about H.R. 4012. You have already received the explanation below from Jon Samet. My explanation is that you should read the two attached commentaries by Lamar Smith: July 30, 2013 WSJ Op-Ed "EPA's Game of Secret Science" and June 24, 2014 WSJ Op-Ed "What is the EPA Hiding from the Public?" Also, you should read my September 28, 2012 ASA JSM Proceedings Paper "Particulate Matter is Not Killing Californians" (http://scientificintegrityinstitute.org/ASAS092812.pdf). Finally, statistician Dr. S. Stanley (Stan) Young, ASA Fellow, will explain the importance of H.R. 4012 to you. Stan is one of the 87 experts who signed the letter in support of H.R. and you should recognize his name because he spoke at the July 15, 2011 @ 3 PM USC Biostat Seminar and met with some of the USC professors who received my email message.

Please let Stan and me know your assessment of H.R. 4012 after reading the links in the House Science Committee press release, the WSJ Op-Eds, my paper, and Stan's paper. Transparent and reproducible science will remain an important issue no matter what happens to H.R.4012.

Thank you very much for your consideration.

From: "Samet, Jonathan" <jsamet@med.usc.edu> To: "Andrea M. Hricko" <ahricko@usc.edu> CC: Duncan Campbell Thomas <dthomas@usc.edu>, "James E. Enstrom" <jenstrom@ucla.edu>, "Scott A. Fruin" <fruin@usc.edu>, William Gauderman <jimg@usc.edu>, "Frank D. Gilliland" <gillilan@usc.edu>, Rob Scot McConnell <rmcconne@usc.edu>, "Samet, Jonathan" <jsamet@med.usc.edu>, "Wu, Anna" <Anna.Wu@med.usc.edu> Subject: Re: story on Secret Science Reform Act Date: Thu, 3 Jul 2014 21:36:02 +0000

all, there is a long story here that dates to the 1996 PM Standard and use of the Harvard and ACS data on particles and mortality. At that time, there were efforts to obtain release of these data sets (to industry) that resulted in the HEI re-analysis led by Krewski. This is about the same story--EPA has been subpoenaed for these data once more, even though they don't have them. The last episode led to the Shelby Amendment and mandated data sharing under some circumstances. Another mixing of special interests, science and policy. Jon

Jonathan M. Samet, MD, MS Professor and Flora L. Thornton Chair Department of Preventive Medicine Keck School of Medicine Director, Institute for Global Health University of Southern California Soto Street Building, Suite 330A 2001 N. Soto Street, MC 9239 Los Angeles, CA 90089 Phone: 323.865.0803 Fax: 323.865.0854

For FEDEX deliveries use zip code 90032

For appointments and scheduling please contact:

Luz Moncayo Email: <u>moncayo@USC.edu</u> Phone: 323.865.0401 Sent from my iPad

On Jul 3, 2014, at 12:40 PM, "Andrea M. Hricko" <<u>ahricko@usc.edu</u>> wrote:

http://www.eenews.net/stories/1060002292

From: Duncan Campbell Thomas
Sent: Thursday, July 03, 2014 10:11 AM
To: James E. Enstrom
Cc: Andrea M. Hricko; Scott A. Fruin; William Gauderman; Frank D. Gilliland; Rob Scot McConnell; Jonathan M Samet; Anna H Wu-Williams
Subject: Re: Request to USC to Support Secret Science Reform Act

Huh??? Since when does EPA use "secret science"??? I don't recognize a single name on the 87 experts list, other than Enstrom. So what's the back story? Sounds like another Republican antiscience, anti-regulation ploy. I couldn't get to the WSJ op-ed article, so if one of you has it, maybe worth circulating.

On Jul 3, 2014, at 9:57 AM, James E. Enstrom <<u>jenstrom@ucla.edu</u>> wrote:

July 3, 2014

Dear USC Professors,

Since you are scientists with extensive expertise in air pollution epidemiology and the EPA, I strongly encourage you to support the *Secret Science Reform Act of 2014* (<u>H.R. 4012</u>). This bill was approved by the U.S. House Science Committee on June 24, 2014 (see below) and it will be taken up by the full House of Representatives later this summer. A June 23, 2014 letter of support has been signed by 87 experts ( <u>http://science.house.gov/sites/republicans.science.house.gov/files/documents/Letter%20of%20Su pport%20for%20HR%204012%20-%2087%20Experts.pdf</u>) and additional scientists and academics are indicating their support. Please let me know if you are willing to sign this letter of support for H.R. 4012.

Thank you very much for your consideration.

Sincerely yours,

James E. Enstrom, Ph.D., M.P.H. Physicist and Epidemiologist UCLA School of Public Health and Scientific Integrity Institute jenstrom@ucla.edu

### http://science.house.gov/press-release/committee-approves-bill-prohibit-epa-using-secret-science Committee Approves Bill to Prohibit EPA from Using Secret Science

June 24, 2014

**Washington, D.C.** – The Committee on Science, Space, and Technology today approved the *Secret Science Reform Act of 2014* (<u>H.R. 4012</u>) to require that the Environmental Protection Agency (EPA) base its regulations on data that is public.

**Chairman Lamar Smith (R-Texas)**: "The EPA's regulatory process is both hidden and flawed. It hides the data and then handpicks scientists to review it. The American people foot the bill for the EPA's billion dollar regulations and they have the right to see the underlying data. If the EPA has nothing to hide, and if their data really justifies their regulations, why not make the information public? Data sharing is becoming increasingly common across scientific disciplines. The legislation requires that EPA science be available for validation and replication. Americans impacted by EPA regulations have a right to see the data and determine for themselves if the agency's actions are based on sound science or a partisan agenda. This bill ensures transparency and accountability. The American people deserve the facts. And so does good policy." The *Secret Science Reform Act* was introduced by Environment Subcommittee Chairman David Schweikert (R-Ariz.) and has received letters of support from over 80 scientists and experts, 30 trade associations, the U.S. Chamber of Commerce, the former head of the Office of Information and Regulatory Affairs, the former head of EPA's Clean Air Scientific Advisory Committee, and the California Construction Trucking Association.

**Subcommittee Chairman Schweikert**: "Public policy by public data. Today, with the reporting of H.R. 4012, the Committee took a big step forward in ensuring transparency for the American people."

The *Secret Science Reform Act* does not require any disclosure of confidential information. It would only prohibit EPA's use of secret science. A <u>2013 poll</u> from the Institute of Energy Research found that 90 percent of Americans agree that studies and data used to make federal government decisions should be made public.

Provisions in the bill are consistent with the White House's scientific integrity policy, the President's Executive Order 13563, data access provisions of major scientific journals, the Bipartisan Policy Center and the recommendations of the Obama administration's top science advisors.

For more information on today's markup, including amendments and roll call votes, visit the Science, Space, and Technology Committee <u>website</u>.

June 24, 2014 Wall Street Journal Op-Ed by Lamar Smith "What is the EPA Hiding from the Public": <u>http://online.wsj.com/articles/lamar-smith-what-is-the-epa-hiding-from-the-public-1403563536</u>

Letters Supporting H.R. 4012: <u>http://science.house.gov/letters-support-secret-science-reform-act-2014-hr-4012</u> 87 Experts Letter of Support <u>30 Trade Associations Letter of Support U.S. Chamber of</u> <u>Commerce Letter of Support</u> <u>Dr. Graham Letter of Support Dr. McClellan Letter of Support</u> <u>CCTA Letter of Support</u> <USC Email for Support For Secret Science 070214.xlsx>

Duncan C. Thomas, Ph.D. Professor, Biostatistics Division Verna Richter Chair in Cancer Research Dept of Preventive Medicine University of Southern California 2001 N. Soto Street, C-202F, MC 9234 Los Angeles, CA Zip: 90089-9234 (Postal) 90033 (FedEx) email <u>dthomas@usc.edu</u> phone (323) 442-1218 fax (323) 442-2349 mobile (818) 406-8096

WSJ OpEd EPA's Game of Secret Science Smith 073013.pdf

WSJ OpEd What is EPA Hiding from Public Smith 062414.pdf

January 30, 2017

Jo Kay Chan Ghosh, Ph.D. Health Effects Officer South Coast Air Quality Management District jghosh@aqmd.gov

Dear Dr. Ghosh,

I am writing to express my extreme disappointment with your December 8, 2016 Final Draft 2016 AQMP <u>Appendix I Health Effects</u>. Your January 3, 2017 198-page document, <u>Responses</u> to <u>Comments on Appendix I</u>, DOES NOT address the numerous critical comments that I submitted to you on <u>January 11, 2016</u> and <u>July 26, 2016 and August 15, 2016</u>. Below I describe six major problems with the final version of Appendix I.

1. Appendix I DOES NOT comply with <u>California Health and Safety Code Section 40471 (b)</u>. Instead of satisfying the requirement "the south coast district board, in conjunction with a public health organization or agency, shall prepare a report on the health impacts of particulate matter air pollution in the South Coast Air Basin," you stated on page 188 of your Responses document "it is not the intention of this Appendix to assess whether there is or is not an effect of a specific air pollutant on any particular health endpoint . . . ." Instead of satisfying the requirement to prepare Appendix I "in conjunction with a public health organization or agency," you instead prepared it in conjunction with two aggressive regulatory agencies within CalEPA: OEHHA and CARB. Instead of satisfying the requirement that the "south coast district board shall hold public hearings concerning the report and the peer review," you held four November 2016 public hearings which were conducted without the SCAQMD Board Members

2. Appendix I and your Responses document DO NOT describe the overwhelming evidence of NO relationship [relative risk (RR) = 1.00] between PM<sub>2.5</sub> and total mortality in California. The weighted average of the most recent results from six different California cohorts show RR = 0.999 (0.988-1.010), which means there are NO premature deaths caused by PM<sub>2.5</sub> in California. An appended table shows this null California evidence. This table, which is page 5 of my August 15, 2016 comments, was deliberately omitted from your Responses document.

3. Appendix I and your Responses document completely ignore this statement in my August 15, 2016 comments: "I have now submitted for publication a manuscript with null findings that invalidate the positive nationwide relationship between PM<sub>2.5</sub> and total mortality published in the seminal Pope 1995 paper, which is based on the American Cancer Society Cancer Prevention Study II (CPS II) cohort. My null CPS II cohort findings raise serious doubts about validity of the positive CPS II cohort findings in Jerrett 2005, Jerrett 2009, and Jerrett 2013, which have been used as the basis for the PM<sub>2.5</sub> premature death claims in the PPTs of Drs. Oliver and Shen." My manuscript, entitled "Fine Particulate Matter and Total Mortality in Cancer Prevention Study II Reanalysis," is now in press in a PubMed recognized scientific journal and should appear online in February 2017. This paper provides important new evidence that PM<sub>2.5</sub> does not cause premature deaths anywhere in the United States, including California.

4. Appendix I and the <u>2016 AQMP SES Report</u> rely heavily the PM<sub>2.5</sub>-mortality publications by Dr. Michael Jerrett and his co-authors. You have co-authored with Jerrett seven air pollution related publications during 2011-2016. This co-authorship raises serious doubts about your objectivity, particularly since you have ignored null PM<sub>2.5</sub>-mortality results and have ignored my challenges to the validity of the Jerrett publications. On November 11, 2016 I made a <u>US Office of Research Integrity allegation</u> that Jerrett 2013 falsified and exaggerated the relationship between PM<sub>2.5</sub> and total mortality in California. An ORI Investigator agreed that the Jerrett 2013 results "do not provide evidence that air pollution is directly responsible for mortality." My US ORI allegation and a table showing NO PM<sub>2.5</sub>-mortality relationship in California are appended.

5. Appendix I does not describe the ACTUAL human exposures to PM<sub>2.5</sub>, ozone, and NOx in the SCAB. The human exposures to these pollutants are much lower than the ambient levels recorded at SCAQMD monitors and the average human exposures are well below the level of measurable health effects for these air pollutants. SCAQMD Board Members and SCAB residents must be informed of their actual exposures to pollutants. Furthermore, they must be informed that these levels are well below the corresponding US EPA NAAQS.

6. Appendix I provides no context regarding the impact of air pollution and other risk factors on the overall health of SCAB residents. An appended table shows low 2014 age-adjusted death rates from all causes, all cancer, and all respiratory disease in California and the SCAB. These death rates are among the lowest in the United States and the World. This table, which is page 6 of my August 15, 2016 comments, was deliberately omitted from your Responses document.

If the 2016 AQMP is approved by the SCAQMD Board on February 3, 2017, I will make a strong case to the new US EPA Administrator, the US House Science Committee, the US House Energy Committee, and the US Senate Environment Committee that the AQMP should not be implemented because it is NOT justified on a scientific or public health basis. Also, I will make a strong case to business and taxpayer groups in Southern California that the 2016 AQMP is scientifically unjustified and should not be funded. Many concerned scientists like myself are doing everything we can to stop SCAQMD from implementing new unjustified environmental regulations in Southern California, as part of a national effort to reduce unjustified regulations.

Finally, I am sending this email letter to all UCLA School of Public Health faculty members who have been involved with SCAQMD and/or with your 2011 Ph.D. in Epidemiology. I request that these faculty members assess my above comments and inform SCAQMD whether they believe the 2016 AQMP is justified on a public health basis. These faculty members are directly responsible for your training as an environmental epidemiologist and you, as a prominent public health official, are a direct reflection of the values and integrity of the School of Public Health.

Thank you for taking this message seriously, because it is a VERY SERIOUS message.

Sincerely yours,

James E. Enstrom, Ph.D., M.P.H. UCLA and Scientific Integrity Institute <u>http://climateconferences.heartland.org/james-enstrom-iccc10-panel-8/</u> <u>http://climateconferences.heartland.org/iccc-12/</u> jenstrom@ucla.edu

UCLA School of Public Health Faculty and Doctoral Graduates cc: Ghosh Chair Beate R. Ritz <br/>
dula.edu> Ghosh Prof Onyebuchi A. Arah <arah@ucla.edu> Ghosh Prof Ninez A. Ponce <<u>nponce@ucla.edu</u>> Ghosh Prof Joelle M. Brown <joelle.brown@ucsf.edu> EHS Chair Richard J. Jackson <dickjackson@ucla.edu> EHS Chair John R. Froines <i froines@ucla.edu> EHS Prof Arthur M. Winer <amwiner@ucla.edu> EHS Prof Yifang Zhu <vifang@ucla.edu> Assoc Dean Zuo-Feng Zhang <zfzhang@ucla.edu> Assoc Dean Hilary A. Godwin <hgodwin@ucla.edu> Dean Jody Heymann <jody.heymann@ph.ucla.edu> Dean Linda Rosenstock EPI 2004 Ph.D. Michelle Wilhelm Turner <greenscreen@cleanproduction.org> ESE 2009 D.Env. Kathleen H. Kozawa <Kathleen.Kozawa@arb.ca.gov> ESE 2008 D.Env. Cody G. Livingston <clivings@arb.ca.gov> ESE 2004 D.Env. Todd P. Sax <tsax@arb.ca.gov> ESE 2003 D.Env. Scott A. Fruin <fruin@usc.edu> ESE 1997 D.Env. Michael T. Benjamin < mbenjami@arb.ca.gov> ESE 1995 D.Env. Pablo Cicero-Fernandez pcicero@arb.ca.gov> ESE 1994 D.Env. Mark A. Gold <gold@ioes.ucla.edu> ESE 1988 D.Env. Barry R. Wallerstein <br/>
<br/>
barry.wallerstein@ucr.edu> ESE 1987 D.Env. Emily D.P. Nelson <dremilynelson@gmail.com> ESE 1980 D.Env. Chung S. Liu <<u>cliu@aqmd.gov</u>> ESE 1976 Dr.P.H. Jean J. Ospital <jospital@aqmd.gov>

cc: UCLA Chancellor's Office

2015 RIO Carol Eggac Goldberg <<u>goldberg@law.ucla.edu</u>>
2016 RIO Ann R. Karagozian <<u>akaragozian@conet.ucla.edu</u>>
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VC Diversity Jerry Kang <<u>jkang@equity.ucla.edu</u>>
VP Diversity Christine A. Littleton <<u>littletn@law.ucla.edu</u>>

cc: SCAQMD Key Staff EO Wayne Nastri <<u>wnastri@aqmd.gov</u>> DEO Philip M. Fine <<u>pfine@aqmd.gov</u>> SES Elaine Shen <<u>eshen@aqmd.gov</u>> SES Anthony Oliver <<u>aoliver@aqmd.gov</u>> SES Shah Dabirian <<u>sdabirian@aqmd.gov</u>>

cc: SCAQMD Board Member Joseph K. Lyou <<u>joe@ccair.org</u>> Joseph K. Lyou <<u>marka@enviropolicy.com</u>> Joseph K. Lyou <<u>nnishimura@ccair.org</u>> Joseph K. Lyou <<u>erik.neandross@gladstein.org</u>> Joseph K. Lyou <<u>amartinez@earthjustice.org</u>> Joseph K. Lyou <<u>dpettit@nrdc.org</u>>

Summary Table. Epidemiologic cohort studies of PM2.5 and total mortality in California, 2000-2016 Relative risk of death from all causes (RR and 95% CI) associated with increase of  $10 \,\mu g/m^3$  in PM2.5 (http://scientificintegrityinstitute.org/NoPMDeaths112215.pdf) Krewski 2000 & 2010 CA CPS II Cohort RR = 0.872 (0.805-0.944) 1982-1989 N=40,408 (N=[18,000 M + 22,408 F]; 4 MSAs; 1979-1983 PM2.5; 44 covariates) McDonnell 2000 CA AHSMOG Cohort N~3.800  $RR \simeq 1.00 \quad (0.95 - 1.05)$ 1977-1992 (N~[1,347 M + 2,422 F]; SC&SD&SF AB; M RR=1.09(0.98-1.21) & F RR~0.98(0.92-1.03)) Jerrett 2005 CPS II Cohort in LA Basin N=22,905  $RR = 1.11 \quad (0.99 - 1.25)$ 1982-2000 (N=22,905 M & F; 267 zip code areas; 1999-2000 PM2.5; 44 cov + max confounders) Enstrom 2005 CA CPS I Cohort N=35,783 RR = 1.039 (1.010-1.069) 1973-1982 RR = 0.997 (0.978-1.016) 1983-2002 (N=[15,573 M + 20,210 F]; 11 counties; 1979-1983 PM2.5) Enstrom 2006 CA CPS I Cohort N=35,783 RR = 1.061 (1.017-1.106) 1973-1982 RR = 0.995 (0.968-1.024) (11 counties; 1979-1983 & 1999-2001 PM2.5) 1983-2002 Zeger 2008 MCAPS Cohort "West" N=3,100,000 RR = 0.989 (0.970-1.008) 2000-2005 (N=[1.5 M M + 1.6 M F]; Medicare enrollees in CA+OR+WA (CA=73%); 2000-2005 PM2.5) Jerrett 2010 CA CPS II Cohort N=77,767 RR ~ 0.994 (0.965-1.025) 1982-2000 (N=[34,367 M + 43,400 F]; 54 counties; 2000 PM2.5; KRG ZIP; 20 ind cov+7 eco var; Slide 12) Krewski 2010 (2009) CA CPS II Cohort (4 MSAs; 1979-1983 PM2.5; 44 cov) RR = 0.960 (0.920-1.002) 1982-2000 N=40,408 (7 MSAs; 1999-2000 PM2.5; 44 cov) N=50,930 RR = 0.968 (0.916-1.022) 1982-2000 Jerrett 2011 CA CPS II Cohort N=73,609 RR = 0.994 (0.965-1.024) 1982-2000 (N=[32,509 M + 41,100 F]; 54 counties; 2000 PM2.5; KRG ZIP Model; 20 ind cov+7 eco var; Table 28) Jerrett 2011 CA CPS II Cohort N=73,609 RR = 1.002 (0.992-1.012) 1982-2000 (N=[32,509 M + 41,100 F]; 54 counties; 2000 PM2.5; Nine Model Ave; 20 ic+7 ev; Fig 22 & Tab 27-32) Lipsett 2011 CA Teachers Cohort N=73,489  $RR = 1.01 \quad (0.95 - 1.09)$ 2000-2005 (N=[73,489 F]; 2000-2005 PM2.5) Ostro 2011 CA Teachers Cohort N=43,220 RR = 1.06 (0.96 - 1.16)2002-2007 (N=[43,220 F]; 2002-2007 PM2.5) Jerrett 2013 CA CPS II Cohort N=73,711 RR = 1.060 (1.003-1.120) 1982-2000 (N=[~32,550 M + ~41,161 F]; 54 counties; 2000 PM2.5; LUR Conurb Model; 42 ind cov+7 eco var+5 metro; Table 6) Jerrett 2013 CA CPS II Cohort N=73,711 RR = 1.028 (0.957-1.104) 1982-2000 (same parameters and model as above, except including co-pollutants NO2 and Ozone; Table 5) Ostro 2015 RR = 1.01 (0.98 - 1.05)**CA Teachers Cohort** N=101,884 2001-2007 (N=[101,881 F]; 2002-2007 PM2.5) (all natural causes of death) Thurston 2016 CA NIH-AARP Cohort RR = 1.02 (0.99 - 1.04)N=160,209 2000-2009 (N=[~95,965 M + ~64,245 F]; full baseline model: PM2.5 by zip code; Table 3) (all natural causes of death) Enstrom 2016 unpub CA NIH-AARP Cohort N=160,368 RR = 1.001 (0.949-1.055) 2000-2009 (N=[~96,059 M + ~64,309 F]; full baseline model: 2000 PM2.5 by county)

### Allegation of Research Misconduct by Dr. Michael Jerrett and Co-Authors

James E. Enstrom, Ph.D., M.P.H. UCLA and Scientific Integrity Institute jenstrom@ucla.edu

November 11, 2016

I allege research misconduct (falsification) by UCLA Professor Michael Jerrett, Ph.D., and his primary coauthors C. Arden Pope, Ph.D., Daniel Krewski, Ph.D., George Thurston, Sc.D., Richard T. Burnett, Ph.D., Michael J. Thun, M.D., and Susan P. Gapstur, Ph.D., regarding their attached September 1, 2013 *AJRCCM* paper "Spatial Analysis of Air Pollution and Mortality in California" (<u>http://www.atsjournals.org/doi/abs/10.1164/rccm.201303-0609OC</u>). The authors received a portion of their funding for this research from NIEHS and CDC within DHHS. While claiming that fine particulate matter (PM2.5) was associated with mortality from all causes (total mortality) in their study, the authors omitted their own null findings and the null findings of others. These omitted findings clearly show NO association. Thus, they have engaged in falsification as defined by DHHS and the Public Health Service: "omitting data or results such that the research is not accurately represented in the research record" (Section 93.103(b) of 42 CFR 93) (http://ori.hhs.gov/sites/default/files/42\_cfr\_parts\_50\_and\_93\_2005.pdf).

The *AJRCCM* paper claims there is a positive relationship between PM<sub>2.5</sub> and mortality from all causes in California because their "conurbation" land use regression (LUR) model yielded a slightly positive relative risk of RR=1.060 (1.003-1.120), as shown in Table 6. However, complete study results are in the October 28, 2011 Jerrett CARB Final Report "Spatiotemporal Analysis of Air Pollution and Mortality in California Based on the American Cancer Society Cohort: Final Report" (http://www.arb.ca.gov/research/apr/past/06-332.pdf). The eight entirely null models, shown in the attached Report Table 22, were omitted from the paper. The results for all nine models are shown in my Summary Table on the next page. The weighted average relative risk for all nine models is RR=1.002 (0.992-1.012), which means NO relationship.

Furthermore, the *AJRCCM* paper does not cite any of the null California PM<sub>2.5</sub>-mortality results from other papers and reports dating back to 2000, including earlier findings by Dr. Jerrett. These results are shown on the next page, as well as on the attached August 15, 2016 Summary Table that I presented to SCAQMD (<u>http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/Draft2016AQMP/2016-aqmp-appendix-i-comment-letter</u> (letter #7). The weighted average relative risk for the most recent result from each of the six different California cohorts is RR=0.999 (0.988-1.010), which means NO relationship.

I contend that the falsification in the paper was deliberate because it was done after extensive criticism of the June 9, 2011 Draft Report and the October 28, 2011 Final Report. This criticism was presented to the authors via CARB by myself, William M. Briggs, Ph.D., John D. Dunn, M.D., S. Stanley Young, Ph.D., Gordon Fulks, Ph.D., and Frederick W. Lipfert, Ph.D. A compilation of all criticism of the 2011 Report is attached (http://www.scientificintegrityinstitute.org/JerrettCriticism102811.pdf). Detailed criticism of the *AJRCCM* paper, including its misrepresentation of the results contained in the CARB Report, was given by Dr. Briggs in his statistical blogs of August 6, 2013 (http://wmbriggs.com/blog/?p=8720), September 11, 2013 (http://wmbriggs.com/blog/?p=8990), and September 25, 2013 (http://wmbriggs.com/blog/?p=9241).

In conclusion, Dr. Jerrett and his co-authors falsified the relationship between PM<sub>2.5</sub> and total mortality in California in their *AJRCCM* paper by deliberately omitting their own null evidence and the null evidence of others. This is quite disturbing because PM<sub>2.5</sub>-mortality claims in the paper are being used as public health justification for the very costly SCAQMD 2016 Air Quality Management Plan (<u>http://www.aqmd.gov/</u>).

**Summary Table.** Epidemiologic cohort studies of PM2.5 and total mortality in California, 2000-2016 Relative risk of death from all causes (RR and 95% CI) associated with increase of 10 µg/m<sup>3</sup> (IQR=10) in PM2.5

| <u>Study (Year)</u>   | <u>Cohort</u>          | <u>RR</u>   | <u>95% CI</u>   | F-U Years   |  |  |
|---|------------------------|---|---|---|--|--|
| Jerrett 2013 (AJRCCM Table 6 Model)   | CA CPS II              | 1.060 (   | (1.003–1.120)   | 1982-2000   |  |  |
| Jerrett 2011 (CARB Report Figure 22)  | CA CPS II              |   |   |   |  |  |
| KRG IND Model (Table 30, IQR=8.52902→10.0)<br>KRG ZIP Model (Table 28, IQR=8.4735→10.0)<br>KRG IND+O3 Model (Figure 22 extrapolated, IQR=10.0)<br>IDW IND Model (Table 29, IQR=8.74→10.0)<br>IDW ZIP Model (Table 27, IQR=9.37→10.0)<br>BME IND Model (Figure 22 extrapolated, IQR=10.0)<br>LUR IND Model (Table 31, IQR=5.35→10.0)<br>LUR IND+5 Metro Model (Abstract Table 1, IQR=10.0) [Jerrett 2013 Model]<br>RS IND Model (Table 32, IQR= 5.39→10.0) |                        | 0.993 (<br>1.020 (<br>1.003 (<br>0.995 (<br>1.000 (<br>1.009 (<br>1.080 ( | (0.965-1.020)<br>(0.964-1.023)<br>(0.980-1.060)<br>(0.978-1.028)<br>(0.967-1.025)<br>(0.975-1.025)<br>(0.980-1.039)<br>(1.000-1.150)<br>(0.968-1.029) | 1982-2000<br>1982-2000<br>1982-2000<br>1982-2000<br>1982-2000<br>1982-2000<br>1982-2000<br>1982-2000<br>1982-2000 |  |  |
| Weighted Average of All Nine Models   |                        | 1.002 (   | (0.992-1.012)   | 1982-2000   |  |  |
| Other Results by Jerrett and Other Investigators  |                        |   |   |   |  |  |
| Krewski Jerrett 2000 (RR for CA 2010)   | CA CPS II              | 0.872 (   | (0.805-0.944)   | 1982-1989   |  |  |
| McDonnell 2000 *  | CA AHSMOG              | ~1.00 (   | 0.95 – 1.05)  | 1977-1992   |  |  |
| Jerrett 2005  | CPS II (LA Basin Only) | 1.11 (  | 0.99 - 1.25)  | 1982-2000   |  |  |
| Enstrom 2005 *  | CA CPS I               | 0.997 (   | (0.978-1.016)   | 1983-2002   |  |  |
| Zeger 2008 *  | MCAPS "West=CA+OR+WA"  | 0.989 (   | (0.970-1.008)   | 2000-2005   |  |  |
| Jerrett 2010  | CA CPS II              | ~ 0.994 (   | 0.965-1.025)  | 1982-2000   |  |  |
| Krewski Jerrett 2009 (RR for CA 2010)*  | CA CPS II              | 0.968 (   | (0.916-1.022)   | 1982-2000   |  |  |
| Lipsett Jerrett 2011  | CA Teachers            | 1.01 (  | 0.95 – 1.09)  | 2000-2005   |  |  |
| Ostro 2011  | CA Teachers            | 1.06 (  | 0.96 – 1.16)  | 2002-2007   |  |  |
| Ostro 2015 *  | CA Teachers            | 1.01 (  | 0.98 - 1.05)  | 2001-2007   |  |  |
| Thurston 2016 *   | CA NIH-AARP            | 1.02 (  | 0.99 - 1.04)  | 2000-2009   |  |  |
| Weighted Average of Latest Results (*) from Six California Cohorts  |                        |   | (0.988-1.010)   |   |  |  |

# 2014 Age-Adjusted Death Rates by State and County and Ethnicity

Deaths per 1,000 persons (age-adjusted using 2000 U.S. Standard Population) with 95% Confidence Interval shown in parentheses (<u>http://wonder.cdc.gov/ucd-icd10.html</u>)

September 8, 2016

| Location 2  | 2014 Age-Adjusted Death Rate (95% Confidence Interval) |                          |                  |  |
|---|--|--------------------------|------------------|--|
|   | All Causes   | All Cancer               | All Respiratory  |  |
|   | ICD-10=All Codes                                       | ICD-10=C00-D48           | ICD-10=J00-J98   |  |
|   |  |                          |                  |  |
| United States<br>(50 States + DC)                     | 7.25 (7.24-7.26)                                       | 1.66 (1.65-1.66)         | 0.71 (0.71-0.71) |  |
| California (2 <sup>nd</sup> lowest State)             | 6.06 (6.03-6.08)                                       | 1.48 (1.46-1.49)         | 0.57 (0.56-0.57) |  |
| South Coast Air Basin<br>(SCAB = Los Angeles, Orange, | 5.93<br>Riverside, and San Berna                       | 1.46<br>ardino Counties) | 0.55             |  |
| Hawaii (Lowest State)                                 | 5.89 (5.77-6.00)                                       | 1.44 (1.38-1.49)         | 0.53 (0.50-0.56) |  |
| Los Angeles County                                    | 5.71 (5.66-5.75)                                       | 1.42 (1.40-1.44)         | 0.53 (0.52-0.55) |  |
| Orange County   | 5.48 (5.40-5.56)                                       | 1.38 (1.34-1.42)         | 0.47 (0.45-0.49) |  |
|   |  |                          |                  |  |
| California Hispanics                                  | 5.02 (4.97-5.07)                                       | 1.18 (1.16-1.20)         | 0.39 (0.38-0.41) |  |
| SCAB Hispanics  | 4.96   | 1.19                     | 0.39             |  |

#### Recent PM2.5 Activities Documenting NO Relationship Between PM2.5 and Total Mortality in US

PM2.5 Working Group Meeting at Heritage Foundation, Washington, DC

James E. Enstrom, PhD, MPH, FFACE UCLA and Scientific Integrity Institute jenstrom@ucla.edu

October 1, 2018

May 30, 2018 Enstrom Comments to May 31, 2018 EPA SAB Meeting re May 29, 2018 Enstrom D-R Response to December 13, 2017 Pope-ACS D-R Criticism of March 28, 2017 Enstrom D-R Reanalysis of ACS CPS II, which identified errors in Pope 1995, HEI 2000, HEI 2009 https://yosemite.epa.gov/sab/sabproduct.nsf/D41456F68B9F91658525829D004DBD73/\$File/88483770.pdf

August 14, 2018 Enstrom Comments on EPA Transparency Rule (above three D-R articles & Spring 2018 JAPS article) EPA Docket Link: <u>https://www.regulations.gov/document?D=EPA-HQ-OA-2018-0259-8290</u>

August 16, 2018 Enstrom EPA Comments on EPA Transparency Rule (US and CA Meta-Analyses of PM2.5 deaths) EPA Docket Link: <u>https://www.regulations.gov/document?D=EPA-HQ-OA-2018-0259-6945</u>

August 24, 2018 "NO response" to August 17, 2018 Enstrom letter to CVS Chief Medical Officer Troy Brennan challenging CVS Health corporate partnership with ACS and support of ACS research, which ranks EPA PM2.5 NAAQS as second among "Our Proudest Achievements" in ACS epidemiology

September 14, 2018 NEJM Rejection of September 11, 2018 Presubmission Inquiry re Enstrom NEJM Prospective: 1) challenging validity of August 29, 2018 Joel Schwartz NEJM Perspective "'Transparency' as Mask?" DOI: 10.1056/NEJMp1807751, 2) supporting EPA Transparency Rule based on my ACS CPS II Reanalysis, and 3) providing link to fully deidentified H6CS person-year data for Lepeule 2012.

September 14, 2018 73-page Enstrom Comment to SJVAPCD and CARB on misrepresentations in 2018 Draft Plan for PM2.5 and strong case for no further PM2.5 regulations in San Joaquin Valley <u>https://www.arb.ca.gov/lispub/comm/bccommlog.php?listname=sjvsipsupplement</u>

September 27, 2018 Enstrom Email to Fresno Bee Editor challenging objectivity and accuracy of their articles on 2018 Draft Plan for PM2.5 and testimony at September 24, 2018 EPA Hearing in Fresno → potential FB article focused on Enstrom SJVAPCD comment and September 21, 2018 Milloy OpEd

September 28, 2018 Intrepid Insight "Statistical Review of Competing Findings in Fine Particulate Matter and Total Mortality Studies" by brilliant UCLA PhD economics graduate student (<u>https://www.intrepidinsight.com/pm25\_statreview/</u>). Random effects model meta-analyses of nine US cohorts and six California cohorts show PM2.5 relationship to total mortality is consistent with relative risk of 1.00 in both US and California if proper study results are used in meta-analyses.

Action Item: PM2.5 Working Group needs to write letter to Pope and ACS challenging them to defend or retract their claim that there are PM2.5-related premature deaths in the US based on CPS II data.

# Los Angeles Times March 25, 2006

# Study Doubles Estimate of Smog Deaths

USC researchers amass measurements of lethal particulate matter from hundreds of locations in the L.A. Basin. State may raise its official figures. <u>March 25, 2006</u>|Janet Wilson | Times Staff Writer

The number of deaths from breathing sooty smog in California may be more than twice as high as previously estimated, based on a recent USC study that examined the risk of such deaths in the Los Angeles Basin.

A team of researchers headed by Michael Jerrett, associate professor of preventive medicine, found two to three times greater risk of mortality from heart attacks, lung cancer and other serious illness tied to chronic exposure to fine particulate matter than did previous studies.

The study looked at specific soot measurements and deaths in hundreds of neighborhoods -rather than relying on citywide annual averages used in the past -- and detected the largest increased risks in the Inland Empire, Jerrett said.

Fine particulate matter spewed out by cars, trucks, locomotives, ships, planes, refineries and other sources lodges deep in the lungs and is widely considered the most lethal form of air pollution.

The staff of the California Air Resources Board said this week they are considering boosting statewide death estimates based on the USC data, pending independent review.

"I think candidly it's likely," said Michael Scheible, deputy executive director of the board. "The research suggests we will end up raising our estimates ... but we want to be cautious."

Currently, state officials estimate 9,000 Californians die annually from diseases caused or aggravated by air pollution, more than half of them in Southern California.

That number could double or even triple if the Air Resources Board incorporates the USC data into its estimates, Scheible said.

He said the board decided Thursday that the USC study and two others examining the effect of air pollution on mortality should undergo one more layer of review to determine the best possible way of applying them statewide. That review could be completed by the end of summer.

The other studies include one by researchers at Harvard University who found that as soot pollution declined in six northeastern cities, related deaths declined as well. The other, a recent study by Loma Linda University, found increased coronary deaths among women exposed to both fine particulate matter and ozone.

The Times reported earlier this week that one in every 15,000 Californians -- about 66 per million -- is at risk of contracting cancer from breathing chemicals in the air over his or her lifetime, according to the U.S. Environmental Protection Agency's recent National-Scale Air Toxics Assessment. The study was based on emissions of 177 chemicals in 1999.

"The more we learn about particulate, the worse the news is," said Jerry Martin, a spokesman for the Air Resources Board, who added that as recently as 10 years ago, ozone and toxics were considered the problem. "Part of that is the technology for looking at very fine particles keeps improving.... A fine particle is less than one-twenty-eighth the size of a human hair. At that size, it can actually permeate right through your lungs into your bloodstream and cause heart problems."

Other air regulators and clean-air advocates said the USC study points to the need to toughen national standards for fine particulate.

"The study underscores the extremely grave severity of the threat from air pollution," said Frank O'Donnell of Clean Air Watch in Washington, D.C. "It draws a huge line under the need for the federal government to take aggressive action against existing sources of diesel soot."

Sam Atwood, spokesman for the South Coast Air Quality Management District, said the agency's chief health expert "considers it a significant study that bolsters the need to strengthen particulate matter standards."

EPA administrator Stephen L. Johnson has drawn criticism for proposing new standards for particulates considered too lax by his own scientific advisory panel. He is facing a court-ordered September deadline to make a final decision.

The highest death rates from smog-related illnesses in the USC study were found in the Inland Empire, where diesel soot is blown by prevailing winds. In western Riverside and San Bernardino counties, the soot is trapped by four mountain ranges.

"Somebody living in San Bernardino is two or three times more likely to die from smog during a given period than someone in Venice," Jerrett said.

The risk of fatal heart attacks tied to soot was as much as 39% higher in the smoggiest areas. Deaths from diabetes, though few, were twice as high in those areas.

The current mortality estimate is based on a 2002 national study of 500,000 people that found a 6% increased risk of death with each additional 10 micrograms of fine particulate per cubic meter of air. But the national study used just three monitors in the L.A. basin, missing major pockets of pollution, according to Jerrett.

He said the new study, co-written by the lead researcher on the 2002 work, found sharply higher rates of risk, between 11% and 17%, because it analyzed soot measurements and deaths in 269 ZIP Codes and 23 monitoring sites across the basin.

He said researchers studied nearly 23,000 Los Angeles-area residents who are part of a longterm study of the effects of air pollution begun by the American Cancer Society in 1982. He said more than 40 variables, including smoking habits and diet, were taken into consideration.

A separate USC study published this week in Environmental Health Perspectives Journal found that ozone, a different type of air pollution, reduced sperm counts in Los Angeles men. Other pollutants did not affect sperm counts.

"The data indicated that for every 14 parts per billion increase in ozone, we had an approximate drop of 3 million sperm per millimeter," said lead author Rebecca Sokol, a USC endocrinologist. That is about a 3% drop in sperm as the ozone level rose, especially on smoggy summer days.

The smoggiest day measured was 50 parts per billion, but she said that such heavy smog days were rare.

"These changes are not going to put men in the infertile scenario," she said. Still, she noted that all the days measured had smog levels below the current California legal standard of 80 parts per billion.

More than 5,000 samples from men known to be fertile were taken. Next, the researchers plan to study the possible relationship between ozone and infertile men.

http://infotruck.blogspot.com/2009/10/driven-away-usa-ports-clean-air-program.html

## 2009-10-11 Los Angeles CAL, USA

### Driven Away \* USA - Ports' clean air program shuts down some truckers.

Randy Thomas Trucking is preparing to close his business, he's unable to purchase new trucks to comply with port regulations taking effect in January

<u>Reprinted from October 12, 2009 Los Angeles Business Journal article by FRANCISCO VARA-ORTA</u> <u>http://labusinessjournal.com/accounts/login/?next=/news/2009/oct/12/driven-away/</u> <u>http://los-angeles-business-journal.vlex.com/vid/driven-ports-clean-air-shuts-truckers-69119761</u>



Randy Thomas has spent the last four decades proudly running his South Los Angeles trucking firm, which services the ports of Los Angeles and Long Beach... As the ports ballooned to become the largest trade complex in the country, Thomas' business grew from one truck he drove to a thriving little firm with 15 drivers. He put his three children through college – the first generation in his family to go. He was starting to look forward to retiring. He planned to leave his business to his family... Instead, the 60-year-old owner of Randy Thomas Trucking is preparing to close his business about Christmas. The reason: He's unable to purchase new trucks to comply with port regulations taking effect in January... In all, about 900 trucking companies shuttle cargo containers in and out of the two ports. Hundreds of them, like Thomas' company, are in danger of slipping out of existence in the next few months. Following them are thousands of truckers who own their own rigs and contract with small companies like Thomas'... The recession-driven downturn in trade has pushed them to the precipice, but many believe what's shoving them over the edge is the Clean Trucks Program, which falls hardest on small operators... The program seeks to eliminate old polluting trucks from the ports. The program in October 2008 banned trucks made before 1989. But on Jan. 1, a more stringent ban extends to all trucks made before 1994 and those that have an engine made before 2004... It's unclear how many trucks will be sidelined as a result, but the number is a big one. The ports earlier estimated that as many as 12,000 trucks would fall into that criteria, but last week the L.A. port estimated 4,000 to 6,000 trucks would be banned Jan. 1... A new diesel truck costs about \$100,000, while retrofitting a truck with a new engine costs about \$10,000 to \$15,000. Many small trucking firms, already scraping by on low margins, paying off existing trucks and whacked by the downturn in business at the ports, say it's not worth it to load up on debt to stay in the industry... (End of Road: Randy Thomas will cut the ignition on his trucking firm in December)

posted by truckbus @ 6:40 AM