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June 2, 2011

California Air Resources Board
1001 I Street
P.O. Box 2815
Sacramento, CA 95812

Attn: Members of the Board

RE: Comments on Resolution 10-44

WHEREAS, while the California Air Resources Board continues to attempt to justify onerous and expensive regulations on Industry by building a "House of Cards"¹, the economy continues decline into the tank.

Whereas the CARB Resolution 10-44 dated December 17, 2010 is yet another un-authored effort to justify mandates using inadequate and unreliable science.

WHEREAS, un-authored edicts, based on bad human health effects science have become the usual inadequate claims since the October 2008 Initial Statement of Reasons (ISOR) "Tran" Report was debunked for many reasons, including unreliable and inadequate science evidence and rationales and is based on that inadequate science that are the foundation for the regulatory regime promoted by CARB. **See Appendix A.**

WHEREAS, Chair Nichols and others kept the Tran fraud and the unreliable and inadequate science on fine particulates from the CARB Board. The Cal EPA leadership and CARB Board were not adequately informed of the weaknesses of CARB research before approving CARB regulatory regimes. **See Appendix B.**

WHEREAS, Chair Nichols promised to revisit and "redo" the small particles risk analysis on December 9, 2009 and report but has never acted on that promise. **See Appendix C.**

WHEREAS, The February 26, 2010 CARB Symposium on "Estimating Premature Deaths from Long-term Exposures to PM2.5" showed that the significant elements of the Tran Report were inadequate to prove the assertions of CARB on premature deaths and

¹ Delta's House of Cards Letter dated February 17, 2010

not likely to withstand a reasonable scientific analysis. One cannot avoid the conclusion that CARB leadership knew this and promoted a deception. See **Appendix D**

WHEREAS, CARB and U.S. EPA continue to claim thousands annual “premature deaths” in California associated with PM2.5 when the research they have funded shows a very weak or non-existent association.

WHEREAS CARB, in spite of its obligation to the public to be honest and forthright as well as reliable in its scientific claims, continues to promote the discredited ISOR along with an un-authored and poorly referenced August 2010 report as rationale to justify regulations. Is it reasonable to trust that the CARB has met its obligation to the public for candor, honesty and prudence in promulgating regulations? Is it not scandalous that the CARB leadership would promote unreliable research but not provide reasonable justification for that commitment?

WHEREAS, now CARB claims it is acting on good science, but fails to show that the ISOR contains good science as explained and documented above.

WHEREAS, CARB maintains that there are health risks “associated” with Diesel PM (DPM) that at this point are claims based without reliable science.

WHEREAS, CARB continues to assert the new fine particle regulations will save thousands of lives, without any supporting California specific studies or even National studies to make their claims reliable. (Ice cream and drowning are associated as they occur more frequently in summertime, but that proves no causal relationship). When CARB claims that small particles cause a small effect in premature death are they ready to say that’s different from the association between ice cream and drowning? If they do, what association would they propose to count on for their proof?

WHEREAS, in human health effects studies associations are not proof of causation unless they are based on plausible theories of toxicity and large effects (associations that show at least a doubling of, or 100+% increase, in the effect). CARB cannot point to effects that are large enough to establish causation. See **Appendix E**.

WHEREAS, the CARB funded scientist (and long time exponent of CARB regulatory regimes of small particle control) Dr. Jerrett, based on his preliminary findings at the February 26, 2010 CARB Symposium, agrees with Dr. Enstrom and others that there are NO PREMATURE DEATHS RELATED TO FINE PARTICLES (PM2.5) IN CALIFORNIA.

WHEREAS, Dr. Jerrett’s much lauded and handsomely compensated California Specific Final Report on health risks associated with DPM is a year and one-half late and counting, but has yet to develop evidence to disprove Enstrom and others that will demonstrate serious small particle death or health effect. See **Appendix F**.

WHEREAS, CARB continues to use “FACTOIDS” (something fictitious or unsubstantiated that is presented as fact, devised especially to gain publicity and accepted

because of constant repetition), without citations to studies used to show health risks to attempt to convince the public that regulations will save lives. For the FACTOIDS used and abused by CARB, see **Appendix G**.

WHEREAS, CARB has the following quote on their website “As a result of this review, the U.S. EPA concluded that there is a causal relationship between exposure to fine particle pollution and premature death. A causal relationship indicates the highest level of scientific certainty.” <http://www.arb.ca.gov/newsrel/newsrelease.php?id=149>.

WHEREAS, the U.S. EPA is now apparently manufacturing FACTOIDS used by CARB and CARB then references those FACTOIDS to justify its actions.

WHEREAS, there is not one study used by the U.S. EPA (or CARB) that meets the minimum evidentiary admissibility standards required in Federal Court as evidence of catching a cold, much less causing premature death from PM2.5,² CARB posts the deceptive information as truthful and applicable to California. See **Appendix H**.

WHEREAS, CARB cannot supply proven evidence of health risks and premature death and now the CARB has resorted to the use of the U.S. EPA’s new (unsubstantiated) claim of premature death causation by DPM.

WHEREAS, the claims by the EPA come from the same studies that do not apply to Western United States (specifically California) and the small effects of the studies would deny them admissibility in a Federal Court applying the proper rules of evidence.

WHEREAS, CARB admits to using the EPA’s risk assessment methodology as the basis for their estimate of premature death, making the health risk for Californians essentially zero as explained above.

WHEREAS, implementing regulations on fine particles in California based on these nationwide studies would be like placing land use restrictions in Pennsylvania due to a threat to the endangered desert tortoise, a denizen of the Mohave Desert.

WHEREAS, CARB’s claims of staff working with private industry in developing amendments is a deception and a ruse since these sessions have only resulted in setting unwarranted regulations without proven justification.

WHEREAS, tweaking and tuning un-justified regulations does not solve problems but creates new ones, and this constant “water boarding” of businessmen via regulation and taxation will just further the demise of California’s economy.

WHEREAS, CARB’s destruction and diminution of legally purchased personal property assets by regulations that make them worthless and illegal is a violation of basic common

² Reference Manual on Scientific Evidence, Pg 375-384 (2nd ed., Federal Judicial Center, 2000)

law in America and a violation of the State and Federal constitutional clauses on “takings”. U.S. and California Constitutions prohibit actions that violate basic protection of the rights of private property. **See Appendix I.**

WHEREAS, the March 2011 US EPA Regulatory Impact Analysis (RIA) of the Proposed Toxics Rule Table 1-2 (page 1-4) shows virtually NO "premature deaths" (1.8% of U.S. total) in Western U.S (11 States including California).
<http://www.epa.gov/ttn/ecas/regdata/RIAs/ToxicsRuleRIA.pdf>

WHEREAS, CARB has perpetrated a scientific fraud and pursued an unreasonable regulatory regime that invades the property rights, personal safety and welfare and economic rights of the citizens of California. This overreach and confiscatory misconduct will result in the following:

- The bankrupting of the majority of those businesses involved in transportation.
- A substantial increase in unemployment and economic deprivation with the eventual deaths and illness and overall decline in health of the populace.
- An increase in cost of living and decline in economic competitiveness of California businesses, all resulting in a decline in quality of life for citizens of California.
- The cost of living, in everything from apples to zippers, will eventuate in hardship, borne most severely by those in lower income and education sectors.
- The result of the deprivation will be the most regressive “tax” upon the citizens of California ever placed, the regressive tax of depression and the arrival of want and deprivation in a State that has always been a beacon of opportunity and reward for hard work.
- A decrease in State revenues that will accelerate the decline and even sweep the white collar comfort workers of State employment into the vortex of an economic depression that cannot be reversed by wishful thinking or an increase in taxes on the supposed “rich”.

THEREFORE, BE IT RESOLVED

That the CARB and Cal EPA Board’s leadership and staff evaluate and analyze the critique presented here with the goal of providing a corrective action for the misconduct and inappropriate policy making that derived from such misconduct. Each and every comment brought up in this paper, as required by Government Code section 11346.9, Public Resource Code section 21080.5(d)(2)(D), and title 17, Cal. Code Regs. Section 6007, shall be seriously considered and responded to.

Be it further resolved that the Board only consider scientific studies that meet the minimum requirements of Federal Courts as evidence of detrimental health effects.

Be it further resolved that CARB discontinues the use of FACTOIDS, whether invented by the CARB staff or the U.S. EPA.

Be it further resolved that the Board seriously consider the effects of unemployment on the health of the citizens of California prior to implementation of any future regulations on business. See Appendix J.

Be it further resolved that the Board replace the famed "Tran" ISOR per outline in the attached Appendix prior to any imposition of any regulations on DPM. See Appendix K.

Be it further resolved that the Board include the March 2011 US EPA Regulatory Impact Analysis of the Proposed Toxics Rule in their decision on DPM regulations. This table confirms that all prior studies used by the CARB to establish premature death from DPM are inappropriate as they do not apply to California residents. See Appendix L.

Be it further resolved that the Board start reading the local newspapers. Some of your staff may only be able to grasp the more simplified articles, so just have them read the headlines. You will find articles such as this occurring daily so it won't make any difference when you begin the search for what is not going on in California. It is about time that the Board wake up and smell the stench in the air inflicted on the only people that hold the possibility to bring California back to the golden state it once was---the California Businessman. See Appendix M.

A personal commitment:

As a 45 year businessman with a group of employee's dependent on my success, I am committed to correcting the serial mistakes of the CARB with regards to air quality regulations that impact business. The future of my state, my children and grandchildren's welfare and health demand that I pursue a more reasonable and sensible conduct in public and policy affairs by Cal EPA and CARB.



Norman "Skip" Brown, Owner

Attachment: Discussion and Appendices

CC:

Governor Jerry Brown
Senator Darrell Steinberg
Senator Ted Gaines
Assemblyperson Alyson Huber
Assemblyman Dan Logue
Assemblyman Tim Donnelly

Discussion and Appendices

Resolution 10-44 claims that “In accordance with Health and Safety Code section 43013(a) and (b), the in-use emission standards and other requirements of the proposed amendments are:

- **necessary,**
- **cost-effective, and**
- **technologically feasible**

for in-use on-road heavy duty diesel fleets within the time provided for compliance;”.

That ignores the nature of the problem and the reality of solutions.

Necessary? For what health reason? The overwhelming California specific evidence shows NO premature death caused by Small Particles, and any “association” claimed is so insignificant it is not proof of anything. Necessary because the Federal EPA mandates it? Well what is the basis of the US EPA mandate—nothing more than the science already discredited in the debates and presentations in California in the past 3 years.

Industry, particularly small companies with limited capital resources, does not have the capital to just discard soon-to-be illegal equipment. The CARB and the US EPA are intent on destroying small businesses. Where is the capital supposed to come from when the assets of companies are being depleted by regulations?

If the CARB can come up with verifiable studies showing causation of premature death from Small Particles, the companies that made business decisions based on the science and regulations at the time should not be required to bear the burden of the losses created by a new regulatory regime.

An equitable solution for purposes of discussion should be that the State should pay for the replacement of legally purchased, privately owned equipment acquired by business and industry in good faith under a previous regulatory regime. *Ex Post facto* penalties are not legal under state or federal law (yes, this amounts to a criminal act). The owners are not guilty of anything by owning and using legally purchased trucks and equipment and should not be forced to abandon this equipment prior to the end of its useful life due to an *ex post facto* law. Enforcing such an unconstitutional and illegal penalty is compensable for the damages done.

Cost effective? For whom? It is not cost effective for those who have to supply the capital or we would be providing it without complaint. Businesses like new trucks as they are less likely to break down. However, the new trucks mandated by CARB are an exorbitant pig in a poke from an investment point of view; they are more expensive, burdened with new encumbrances that increase costs of operation and more sources of mechanical breakdowns from troublesome filters, increased fuel use, maintenance and downtime. Moreover there is no increase in income to compensate for the new

regulations and equipment mandates from CARB, since economic conditions do not allow arbitrary or “at will” price increases.

Technologically feasible? Really? The DPM filters do not work as promised on engines older than 1998 and newer engines foul these filters within hours when used in the usual stop and go traffic conditions. The CARB-generated reports of maintenance are not real world and cherry picked for better conditions like constant speed highway use. That is not real world for equipment that is used for work, not transport.

Daily cleaning is not acceptable, since cleaning the filters daily is a major time and resources problem. I will not belabor the reader with a detailed list of the technological deficiencies of the plans drawn up by CARB bureaucrats with no knowledge of real daily usage of the new proposed magical accessories, but the list is long and the problems significant.

To continue the CARB Resolution:

“....the conclusions and supporting documentation for this analysis are set forth in the ISOR and the benefits of the regulation to public health and the environment justify the costs of compliance, and enforcement.”

The “**benefits to public health**” (supposedly to be in excess of \$60 billion by forestalling or eliminating premature death by DPM) are non existent if reasonable scientific data is used, for example Dr. Jarrett’s finding of no death effect in California. The deaths projected by some CARB science reports have disappeared. The consensus at the February 26, 2010 CARB PM Science Symposium on small particles was that there are **NO PREMATURE DEATHS CAUSED BY SMALL PARTICLES IN CALIFORNIA, AND THAT INCLUDES THE SMALL PARTICLES FROM DIESEL ENGINE EMISSIONS.**

If there are any benefits to public health due to new regulation of small particles, then the public (the beneficiaries) should pay directly for required upgrades (not after the fact due to increased prices of services). However, there are no benefits from controlling something that causes no harm. Small particles in California are a non factor in the health of California Citizens.

And,

“...the Board has considered the economic impact of the regulation on the economy of the State, and the potential adverse economic impacts on California business enterprises and individuals.’

There is no evidence of such a consideration, beyond a generally accepted conclusion of the CARB staff and leadership that any burden is acceptable. That is an assertion based on the discredited policy concept of the precautionary principle (see Appendix E). The CARB cannot and will not burden the state of California with such a discredited concept

as the precautionary principle, which is nothing more than irrational fear dressed up as caution.

At this point reality must be introduced. Economic hardships and deprivation created by CARB regulations are real, not imaginary, and if the CARB reduces employment and creates economic hardship based on the irrational precautionary principle, people will die or suffer deprivations that cannot be justified.

CARB has a real opportunity to cause deaths due to the precautionary principle while chasing imaginary deaths conjured up by agenda driven environmental research on small particles effects. There is no justification to consider small particles in California to be toxic or cause premature deaths.

The CARB staff has no realistic measure of the impact of the economic downturn that might be created by placing regulatory burdens on the transportation, agricultural and construction businesses (to say nothing about the school districts, utility companies, City, County and State fleets), all entities dependent on diesel engines.

California has a significant heavy engine requirement for all the concerns listed above — diesel engines are not a convenience, they are the only engines that work for the requirements of industry and commerce in most instances. Gasoline engines are not just another form of motive power; they are an inferior engine for most kinds of heavy work. Diesel is the only engine that will power big industrial workhorses. Period. The CARB seems oblivious to such a fact.

After creating a diesel engine crisis which was rife with the following:

- conflicts of interest,
- incestuous relationships between CARB, Cal EPA, UCLA Professors,
- authors of studies who provided their own “peer review”,
- keeping key information from Board Members,
- using studies prepared by unqualified authors,
- using “trust me science” by refusing to share the data,
- ignoring conflicting studies,
- using nationwide studies not applicable to California,
- promoting studies that could not be submitted to Federal Courts due to the lack of adequate association to health problems,
- and using FACTOIDS to scare the public,³

CARB then declared what were perfectly legal and functional diesel engines illegal!

CARB officials and “experts”, after ignoring their irrational conduct in the circumstances of non toxic air, suggest that by promoting a delay of implementation, allowing a few (9,000) trucks to avoid requirements (for a while longer), and “allowing” businesses to “only” have to upgrade 30% of its fleet annually, they will alleviate economic hardship(?). Such a sophomoric and inadequate analysis is

³ Delta Letter “CARB’s House of Cards” dated February 17, 2010

reaching at best and does not measure the misjudgment of the CARB staff and analysts. Billions of dollars of trucks and equipment inventory is not a potted plant. It is the stuff of survival for businesses that are constantly required to bond their performance with collateral—collateral is hard stuff (not to mention the source of employment for California residents). CARB officials apparently do not understand such basic business realities or pretend not to understand out of mendacity. What shall it be?

CARB staff does not understand the devastation of the financial capacity by the mandated destruction of the value of the very asset base that businessmen use for bank financing and bonding purposes. Big trucks are not toys. They are tools and an asset base that supplies the collateral necessary to finance business operations. CARB has set about systematically destroying assets of businesses dependent on big equipment, thereby destroying the very businesses themselves and employment thereof.

Consider for a moment, the assets of a construction or trucking company—the majority of the assets have a diesel engine that has been condemned by CARB, arbitrarily without any human health effects science evidence to prove it is toxic to the public. The equipment is now obsolete as it just underwent a catastrophic government-ordered depreciation. Yesterday it was a very valuable asset; today it is junk, illegal and forbidden.

And finally:

“The reporting requirements of the proposed amended regulation which apply to businesses are necessary for the health, safety, and welfare of the people of the state.”

A revisit of the CARB and US EPA deceptive assertions on human health effects and the lack of justification for the CARB regulations make the above statement just another FACTOID!

The CARB claims it sets regulations for the health, safety, and welfare of the people of the State, but it is clear that the CARB has not established the evidence to justify its edicts, and no credible and reliable evidence is presented that confirms that the regulatory regime will save lives or prevent disease. Without evidence that it is acting to mitigate an effect that is established by the evidence, the regulations and their accompanying reporting requirements are not justified or acceptable and place an unnecessary compliance burden on an already overburdened citizenry and business community.

The FACTOIDS promoted by CARB do not survive a reasonable analysis as justifying a regulatory regime, since the FACTOIDS are used to hide CARB's inability to prove up a case for human risk with valid and reliable evidence and California specific proof of human harm and premature deaths. The citizens in general along with the community of businesses and industry correctly object to the new regulations when CARB cannot show evidence to justify the claims that it is

acting to prevent human harm from small particles. If allowed to go forward with the new regulations the CARB will cause human harm due to the economic stress brought on by the costs and the burdens of the small particle regulations. Those economic stressors will cause deaths and disease—the science is unequivocal in favor of the assertion that economic deprivation shortens lives and diminishes quality of life for the citizens (see Appendix J). The CARB should stand down and withdraw its proposed small particle regulations.

Resolution 10-44 amounts to once again reshuffling the deck chairs on the good ship “Titanifornia”. Regardless of CARB’s statement on page 7 of Resolution 10-44, **it does not supply sufficient economic relief to those businesses** required to comply; the regulation is yet again **even more complex**; it **will provide advantages to certain business sectors** (especially the larger firms who operate across the Nation at the expense of California employers and have turnover of inventory that puts smaller businesses at a disadvantage); and the **“planning uncertainty” reaches new heights as CARB prepares additional edicts to meet AB 32 requirements.**

Statements that suddenly CARB and CAL EPA will become industry or business friendly and AB 32 will not add to the regulatory burden are naïve at best. Hopeful thinking or at best, CARB and Cal EPA generated fabrications (while attempting to avoid at all costs the perception that it is destroying business) will not stand. To ignore the reality it to invite the inevitable—CARB and Cal EPA will destroy all entities that depend on diesel engines in pursuing the claim that small particles are killing people, when they are not.

However, before the economy of California implodes, those attempting to protect their sinecure and at worst represent a deceit to achieve some environmental purity at the expense of the health and prosperity of the citizens, will be discovered and censured. The deception will not survive the truth. The only question is: WHAT WILL IT TAKE TO WAKE UP THE BOARD?

Contrary to the directive on page 10, first paragraph of Resolution 10-44, there is **no need to** “determine whether there are feasible alternatives or mitigation measures that could be implemented to reduce or eliminate any potential adverse environmental impacts....”. **See Appendix J.**

CARB Staff has supposedly “considered” the economic impact and finds the amended regulation “doable”. Surely most unsuccessful projects run by bureaucrats looked doable. It is easy to consider a project doable if immunized from reality by tax dollars and a sense of superiority.

The resultant unemployment created by these “doable regulations” will have an impact on State employees enjoying the inflated incomes of bureaucrats in California in the halls at 1001 I Street at some point. When economic reality impacts State employee rolls, it is because State bureaucracy has exceeded the ability of the economy to support it. Excessive regulation such as this will ensure the demise of California.

Maybe at the point of severe distress apparatchiks who considered the proposed edicts doable will realize they have initiated a program that was bound to fail. **California is upside down to the tune of \$425 billion for unfunded pension liabilities, the annual budget is short \$20 billion plus for the foreseeable future, unemployment at all time highs since the Depression and we are borrowing \$40 million a day to pay for unemployment benefits!** The unconscious mandarins of Sacramento would make things worse and hope for the best?

Appendices

Appendix A

Lead Technical Report Author Committed Credential Fraud

The scientific and public health basis for CARB's Statewide Truck and Bus Regulation (on-road in-use diesel regulation or "Truck Rule") is the October 24, 2008 CARB Staff Report on "Methodology for Estimating Premature Deaths Associated with Long term Exposure to Fine Airborne Particulate Matter in California" by lead author Hien T. Tran. However, Tran admittedly misrepresented his scientific qualifications and education. He did not in fact have a Ph.D. from U.C. Davis as he had originally claimed. Rather, Tran purchased a mail-order Ph.D. degree in June 2007 from "Thornhill University," which operates out of a New York City UPS Store. As documented in CARB's April 2009 Notice of Adverse Action, CARB found Tran guilty of "fraud, dishonesty and other failure of good behavior." Further, page 4 of the Notice states "Since you were the lead author and project coordinator of this report which was used to support the Regulation, your lack of credibility has called into question the credibility of the entire Regulation." However, despite fundamentally misrepresenting his credentials, Hien Tran still remains employed by the California Air Resources Board. We find it unacceptable that a 11-year employee who is very familiar with CARB's employment guidelines, was in fact only demoted and his salary was cut by only \$1,066 per month, down to \$7,899 per month (\$94,788/yr.).⁴

Appendix B

Key CARB Personnel Knew About Fraud, Yet Failed to Disclose Crucial Information to the Full CARB Board and Public Prior to Important Vote, and Subsequently Perpetrated a Cover-up

Prior to approving the extremely costly Truck Rule on December 12, 2008, which affects nearly a million trucks and buses in the state, key CARB officials including Chair Mary Nichols, Executive Director James Goldstene, Chief Legal Counsel Ellen Peter and at least one Board Member, Dr. John Balmes, had actual knowledge that the project leader

⁴ Industry Letter to CARB dated June 14, 2010

Hien Tran had falsified his Ph.D. credentials. In addition, on December 3, 2008, Board Members Ronald Loveridge and Barbara Riordan were directly informed by four California scientists that Tran had misrepresented his Ph.D. However, the staff and Board Members chose to conceal this crucial information from the full 11-member Board, as well as the public, until after the Board adopted the controversial Truck Rule. Essentially, CARB purposefully withheld fundamental misrepresentations from the public in order to pass this contentious and costly rule.

In a November 10, 2009 email message to Board Member Dr. John Telles, CARB Chair Mary Nichols admitted she knew of the falsified credentials prior to the Board's vote on December 12, 2008. She also acknowledged that Tran's conduct was illegal and unethical, and admitted that it was a "mistake" to have concealed the information from the other Board Members. Ms. Nichols justified her cover-up by claiming to know that Tran's report was true despite his lies, and therefore decided that the vote should go forward without revealing the "distraction" of his misrepresentations. Dr. Telles filed a formal, November 16, 2009 complaint with CARB Chief Legal Counsel Ellen Peter claiming that key CARB officials had actual knowledge that Tran lied about his qualifications on or before December 10, 2008.⁵

Appendix C

CARB Agreed to Withdraw and "Redo" the Tran Report at its December 9, 2009 Board Meeting

In light of the fraudulent nature of the original Tran Report, the Board directed staff to withdraw and redo the report, with Chair Nichols stating "With today's set of actions, we confidently set out to revalidate the science supporting our rules..." (CARB Press Release, 12/9/09) In fact, Governor Schwarzenegger publicly stated in regards to the scandal, "It is clear...clear responsible action is needed." (*Capitol Weekly*, 12/17/09) Furthermore, CARB spokeswoman Mary Salas Fricke specified that the "Replacement Tran Report" would be completed by April, 2010 "There is going to be a series of workshops and an update to the board in April with some new provisions and a new health report." (*Capitol Weekly*, 12/17/09)

To date, the above statements appear to be no more than mere hot air. The April date came and went without any mention of the "Replacement Tran Report." Compliance with our above-mentioned conditions will certainly be necessary to "revalidate the science supporting our rules" as Chair Nichols desires.⁶

Appendix D

While Tran's lack of adequate credentials should in itself call into question the validity of his report, independent scientists continue to dispute the validity of his original report based on a number of reasons, including:

1. Substantial epidemiologic evidence from six different sources indicates that there is no current relationship between PM_{2.5} (specifically diesel PM) and premature deaths in California. The EPA's own (most recent 2005) California source data of PM_{2.5} indicates that on- and off-road diesel powered vehicles (this includes on-

⁵ Industry Letter to CARB dated June 16, 2010

⁶ Industry Letter to CARB dated June 16, 2010

road diesel trucks and cars) account for just over 10% of the total PM2.5 in California. Consequently fully regulating the existing fleet of on-road diesel powered vehicles will have virtually no quantifiable impact on reducing total PM2.5 levels in CA, but will cost in excess of \$20-billion to implement or \$896,740/ton.

2. The key epidemiologists relied upon by CARB in the October 24, 2008 CARB Staff Report (Drs. C. Arden Pope, Michael Jerrett, Daniel Krewski, and Michael J. Thun) have clear conflicts of interest because they are recipients of CARB and EPA funding, and/or were also involved in review of report. Furthermore, they have repeatedly refused to allow reanalysis of the key American Cancer Society Cancer Prevention Study (CPS II) database, which is in violation of Federal Data Access Act.
3. CARB has not considered several factors relevant to the justification of their diesel emission regulations. California has the fourth lowest total age-adjusted death rate of all 50 states; California is currently experiencing 13% unemployment and 25% underemployment, the highest levels since the Great Depression; none of the epidemiologic evidence used by CARB satisfies the Federal Judiciary Center standards for establishing a causal relationship between PM2.5 and premature deaths.
4. On May 22, 2008 a Draft CARB Report on PM2.5 & Premature Deaths by Hien T. Tran was published. On July 11, 2008 Tran conducted a detailed teleconference with Drs. Enstrom, Pope, Jerrett, and other key scientists who explained their data which was extremely relevant to the rule.
5. On July 11, 2008, 148 pages of mostly critical scientific comments were submitted to CARB in response to the May 22, 2008 Draft CARB Report. The October 24, 2008 Final CARB Report (Tran Report) does not properly include or address the critical comments by Drs. Enstrom, Moolgavkar, North, Dunn and Lipfert, and others.
6. CARB's February 26, 2010 Symposium on "Estimating Premature Deaths from Long-term Exposures to PM2.5" included comments by Dr. Jerrett of UC Berkeley, Dr. Enstrom of UCLA, and many other experts on PM2.5 health effects. Among other Symposium findings, based on the CA CPS I and CA CPS II results, by far the two largest California-specific studies, the number of "premature deaths" associated with PM2.5 exposure is zero, not the thousands of deaths presented to the CARB members when it voted to approve the off-road and on-road diesel regulations. Furthermore, Dr. Jerrett stated in regards to PM2.5 "...we are getting a null result for all causes now and it's because we do see this negative association with all cancer." Dr. Enstrom agreed, "In terms of total deaths, which are what are used to calculate premature deaths by the Air Resources Board, if I didn't misinterpret what he [Dr. Jerrett] said, there was no effect – very consistent with my findings."⁷

Appendix E

Small particles only describe a size, and not the character of the particle, which creates significant uncertainty on the toxicity—talcum powder and weaponized anthrax look alike, for example. Dust from the high desert is not the same as small particles in

⁷ Industry Letter to CARB dated June 16, 2010

industrial areas. Is CARB self-serving and intentionally sloppy in the handling of such matters?

More recent studies on small particle pollution effects by Pope, Jarrett, and Krewski fly in the face of the conclusions of the CARB panel. They show downward trends in health effects in the last half of the CPS study (Pope) that were not properly vetted by CARB and no particle death effect in the western United States and California (Krewski, Samet and Jarrett).

This supposed causation of premature death from “particle size”, without defining the biological plausibility or what the level of toxicity is that would result in mortality, cannot be supported by any scientific study. The California and the Federal EPA, along with the CARB, are using what is known as the “**precautionary principle**”, suggesting that there is a linear relationship to mortality with **any amount** of offending chemicals (or in this case “particles”). Any toxicologist worth his salt will testify that toxicity is defined by dosage. There is a threshold in toxicity, below which no biological effects are known to occur, above which may induce morbidity or mortality. If we are to take this new, unscientific “precautionary principle” to its likely conclusion, we would have to eliminate aspirin, Tylenol and ibuprofen, along with most other drugs available over the counter or by prescription (excessive amounts of these are all toxic).

Appendix F

Doctor Jarrett received a three-year, \$750,000 CARB-funded project “Spatiotemporal analysis of Air Pollution and mortality in California Based on the American Cancer Society Cohort”, initiated in January 2007. This report has still to be made public (if even completed) as of June 2, 2011.

Appendix G

Some recent examples of these FACTOIDS are:

- “Each year in California, diesel PM contributes to up to 24,000 premature deaths and thousands of hospital admissions, asthma attacks and other respiratory symptoms.”⁸
- “CARB’s report estimated that 9,200 premature deaths in California are associated with fine particulate pollution on an annual basis, with a statistical range from 7,300 to as high as 11,000 premature deaths each year.”
<http://www.arb.ca.gov/newsrel/newsrelease.php?id=149>

However, in Table 10: All-Cause – Annual All-Cause Deaths in California Avoided by Attainment of the Annual-Average Federal PM2.5 NAAQS: 2,400 (1,500 to 3,300. 95%

⁸ One of CARB’s 13 FACTOIDS issued in December 2009

confidence interval). The resolution number should be 2,400, not 2,700 as stated in Resolution 10-44.

- Page J-17: Table 1: Estimate of Premature Deaths Avoided Associated with Emission Reductions from Implementation of the On-Road Truck Regulation (2010-2025). Total deaths avoided (from PM & NO_x) = 3,500 (2,700 - 4,400) in 15 years equals 233 / year (based on US EPA methodology using national results (Krewski 2009).
(<http://www.arb.ca.gov/regact/2010/truckbus10/truckbusappj.pdf>) and
(<http://www.arb.ca.gov/regact/2010/truckbus10/correctedappj.pdf>)

So, according to CARB Factoids, whether it is 24,000, 2,700 or 2,400, CARB on-road regulations admittedly will only prevent about 233 deaths per year based on national studies. But these studies do not apply to California! **These numbers are reduced to zero when based on California-specific studies.**

Appendix H

Under the Federal Reference Manual Chapter on Epidemiology, proof of causation of disease or death must, as a minimum, have a relative risk (RR) of 2 (100% increase in effect). The highest relative risk CARB can show is 1.048 (95% CI) on Pope 1995. Follow up studies by Pope (2002) shows a RR of 1.021 (the risk is dropping over time). Note that a RR of 1.00 is no effect. Two to four percent above no effect is hardly evidence that supports proof of causation, whether it be premature death (these studies) or some other effect claim, like asthma or pulmonary or heart disease.

CARB studies are “wink and nod” studies that are published by journals that ignore the rules on causation because these studies never show the necessary effect of a RR of 2 or greater. Smoking cigarettes causes a 1000 percent increase in risk of lung cancer, a lifetime death risk of 10 %- that’s an RR of 10. No epidemiologist has the luxury of finding such effects any more, since the planet earth is a very safe place.

However the CARB would not thrive if the public knew the earth was safe—they must create panic and concern to maintain their handsome budgets. So 2 % premature death rates are published as meaning something, when they mean nothing, and are easily the product of random data blips. Journals (dealing with small effects studies as the only studies available) just change the rules, the funding for more studies is renewed, the budgets continue to grow, and the public is none the wiser.

Should California ignore this well written and documented Reference Manual on Scientific Evidence, (2nd ed., Federal Judicial Center, 2000), that features chapters written by nationally known scientists and lawyers?
www.fjc.gov/public/home.nsf/pages/610?

Just possibly, the guidance of the manual was composed by and sponsored by leaders of the judiciary for a reason. In the case of the guidance on a rule to prove causation for

observational studies found on page 384 that requires a RR of 2, it is because observational studies are notoriously unreliable and not replicable—that means test them again and you can't verify the results. So you need to be careful to find a robust effect before claiming some toxicity.

The rate of lack of replication for observational studies in medicine is 80% (Ioannidis, JAMA, 2005) to over 90% (Young National Institute of Statistical Sciences, www.niss.org/sites/default/files/Young_Safety_June_2008.pdf). This failure to replicate in observational studies has been well-known for over 20 years (Feinstein, Science, 1988). Just how does CARB expect to use studies that do not meet testability, by not supplying the data so the study cannot be replicated? Talk about abuse of discretion!

It means the observational studies that CARB relies on are known by their nature to be unreliable and any claimed effects are even more problematic when the study reports a small effect.

Under what justification can CARB use to impose such onerous and extensive regulations as they propose for this next round of air pollution rules, when *not one study relied on by the CARB panel and staff and reported out as supporting CARB policy meets the minimum rules to be submitted as evidence of causation of health effect in a Federal Court?*⁹

Appendix I

Amendment No. 5 of the US Constitution states, in part: “.....nor shall private property be taken for public use, without just compensation”.

California State Constitution: ARTICLE 1 DECLARATION OF RIGHTS

SEC. 19. (a) Private property may be taken or damaged for a public use and only when just compensation, ascertained by a jury unless waived, has first been paid to, or into court for, the owner.

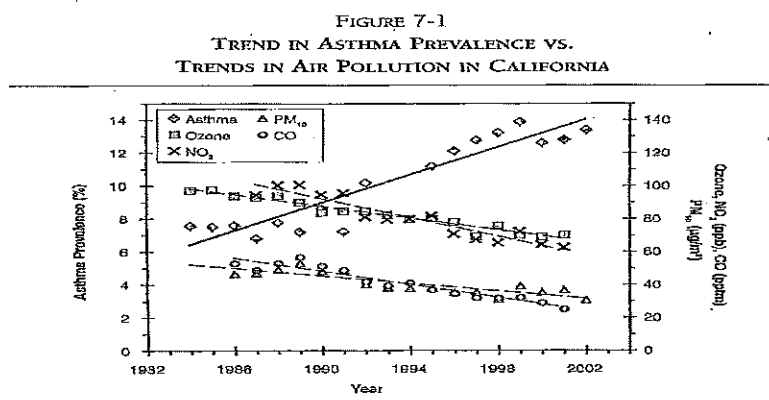
California businesses have not waived these rights, nor have they been paid for the damage to their financial statements via edicts by the State. Delaying the implementation of the regulations does not undo the damage to the financial statements of the owners. Banks will not value the assets higher than the marketplace, and the marketplace value of anything with a diesel engine has been destroyed via existing and proposed edicts. Forcing owners to replace exhaust filtration systems or entire power trains prior to the end of the useful life is another example of a taking by the government. In most cases, these retrofits exceed the present value of the equipment. No legitimate bank will loan money to do this and no sane businessman will borrow money to upgrade perfectly good equipment in today's economic condition, regardless of legal consequences. The result

⁹ Delta's House of Cards Letter dated February 17, 2010

of this will be that the State of California will end up owning a whole stockpile of trucks taken from bankrupt businesses, along with “acquiring” the now unemployed residents.

Appendix J

The worst areas of Los Angeles exceeded the 1-hour ozone standard more than 150 days a year in the 70's and early 80's. By 2007 it was under 25 days a year. For PM, Riverside, CA PM_{2.5} declined 58% from the 1980's to 2006. But between 1980 and 1996, asthma rates rose 75%, and nearly doubled for children. The air is cleaner now than it has been for the last 50 years and getting cleaner every day. Asthma rates continue to increase regardless of improving air quality, giving at least a dispute over whether or not PM has any relationship this illness.¹⁰



Federal mandates are nothing more than mandates against prosperity. California is broke and considered the worst state in the nation to do business in due to taxation and regulation. Businesses are leaving in droves and the once employed have become tax takers, not tax payers. The threat of Federal withdrawal of transportation funding if California doesn't meet their new esoteric air purity requirements is moot, as California will soon cease to be able to contribute funds to these folks for the usual return of only around 90% of the contribution (California is a “donor state”).

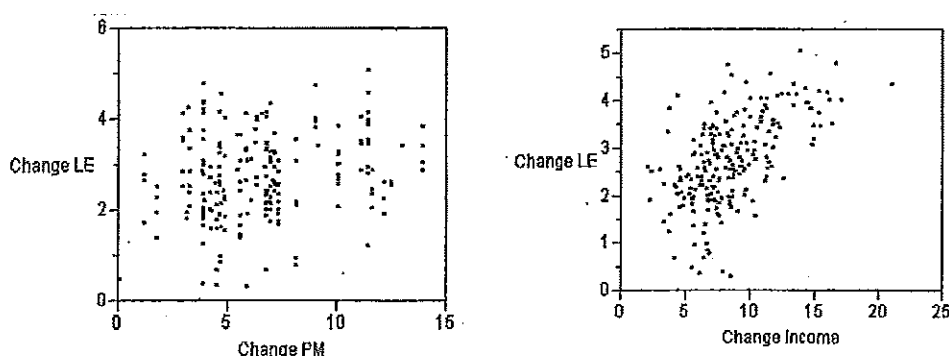
Only a very few businesses will survive these edicts if allowed to stand. Construction unemployment is estimated currently to be plus 40% with no improvement in sight. Destroying employers in the transportation industries via destruction of assets will increase unemployment in that sector, probably taking California's total unemployment into the 20% category. The tax base is disappearing while California is completely upside down financially. Poverty has a proven direct relationship to sickness and premature death, not the phony relationship that CARB is attempting to promote due to a phantom menace. What part of the fact that the County with the cleanest air (Del Norte) is also the least healthy cannot seem to be understood by the CARB Board or staff?

¹⁰ AIR QUALITY IN AMERICA by Joel Schwartz and Steven Hayward, 2007

Prosperity is what improves health conditions. CARB's efforts will destroy the potential for future prosperity, thus destroying the health of the populace.

A well known effect of economic hardship and economic recessions and depressions is human health effects as a result of poverty and deprivation, which are caused usually by underemployment or unemployment. The effects of economic deprivation are well known and real, not "assumed" effects. The below chart shows the Mortality Associations with PM2.5 and income:¹¹

Mortality Associations with PM2.5 and Income



Data from Pope CA, Ezzati M, Dockery DW. (2009)
Fine-particulate air pollution and life expectancy in the United States.
New England Journal of Medicine 360, 376-386.

This 2009 study shows, at best, a modest (if any) improvement in life expectancy with a decrease in PM2.5. The increase in life expectancy with an improvement of income shows a dramatic change. The income chart was derived from the same data used by Pope et al. **Health and the economy are directly related.** With a vibrant economy, people eat better, have less stress and there are resources to deal with problems. This fact cannot be ignored. The difference between a trivial gain in the air quality through draconian regulation (which at today's ambient levels cannot be proven to cause a single health issue) and the devastation of health from the loss of a job is substantial.

CARB has it exactly backwards! There are real causes of negative health effects and premature deaths and one that is undeniable is UNEMPLOYMENT! Give up on the "twin bogeymen", PM and NOx. Stop chasing ozone, which has no proven negative health effects at all.

Appendix K

¹¹ Data from Pope et al. NEJM (2009) personal communication to S.S. Young young@niss.org.

The October 24, 2008 CARB Staff Report "Methodology for Estimating Premature Deaths Associated with Long-term Exposure to Fine Airborne Particulate Matter in California" (original "Tran Report") was admittedly flawed and unreliable. However, it still provided the primary public health justification for the Statewide Truck and Bus Regulation approved December 12, 2008. As you know, when fully implemented this regulation will cost all affected industries, by your own estimate, more than ten billion dollars in compliance actions. Given that the process used to produce the original (Hien)Tran report was severely flawed (both ethically and scientifically), it is imperative that the "Replacement Tran Report" be thoroughly vetted in an open, transparent manner by the unbiased scientists and the general public prior to Board acceptance.

As members of the impacted industries, we request that the final "Replacement Tran Report" meet the following minimum conditions:

1. Since this is a California regulation, the data used to support the report should be California-only data. It is unacceptable that U.S. EPA Integrated Science Assessment for Particulate Matter be "moved to become the basis for" the "Replacement Tran Report" because, in California, PM2.5 (a measurement of mass, not a substance) is not associated with increased mortality or any other significant public health issue.
2. The report should be initially issued in draft form, similar to the May 22, 2008 draft version of the Tran Report.
3. A Curriculum Vitae (CV) should be included for every person who contributes to the authorship of the "Replacement Tran Report."
4. There should be at least three months for public comment and CARB responses to those comments on the draft report.
5. The "Replacement Tran Report" should be based on all research studies, published in peer reviewed journals and it should make reference to other major studies that are in progress and should be reviewed by independent, impartial external experts with no ties, financial or otherwise, to either the Air Resources Board or affected industries.
6. These expert reviewers should be selected by an impartial authority, outside of CARB, e.g. the President of the University of California.
7. External experts should not review and evaluate the importance or validity of their own work or work of their coworkers on research or coauthors on publications.
8. Certain experts should be disqualified as expert reviewers, including those who were aware that PM2.5 was not associated with increased mortality in California but failed to say so, e.g. Professors Jerrett and Pope.
9. All correspondence and commentary (including internal emails) between CARB and review panel members writing and reviewing the new report should be part of the public record.
10. Appropriate data sets for the accepted and approved studies used to create a new report and justify a regulatory regime should be available for review by the public.

Satisfaction of these conditions would go a long way toward restoring confidence in CARB and the CARB policy-making process, addressing and repairing CARB's currently perceived lack of trustworthiness in research and policy making and CARB's past unwillingness to seek and promote constructive input from the citizens of California

and independent scientists regarding air pollution human health effects and implications for policy making and regulatory regimes. At this point any action that fails to incorporate the requested procedures above, or any CARB action to rush the final “Replacement Tran Report” in a closed-to-the-public process, will further diminish CARB’s compromised reputation in the eyes of California’s citizens, the California Legislature, and the national scientific community.¹²

Appendix L

Table 1-2. Estimated Reduction in Incidence of Adverse Health Effects in 2016 for the Proposed Toxics Rule^{a,b} Health Effect	<i>Eastern U.S.</i>	<i>Western U.S.</i>	<i>Total</i>
Mercury-Related endpoints			
IQ Points Lost		510.8	
PM-Related endpoints			
Premature death			
Pope et al. (2002) (age >30)	6,700 (1,900—12,000)	120 (33—200)	6,800 (1,900—12,000)
Laden et al. (2006) (age >25)	17,000 (7,900—26,000)	300 (140—470)	17,000 (8,100—27,000)
Infant (< 1 year)	29 (-32—90)	1 (-1—2)	30 (-33—92)
Chronic bronchitis	4,400 (150—8,600)	97 (3—190)	4,500 (150—8,800)
Non-fatal heart attacks (age > 18)	11,000 (2,700—18,000)	190 (48—330)	11,000 (2,700—19,000)
Hospital admissions—respiratory (all ages)	1,600 (650—2,600)	24 (10—39)	1,700 (660—2,600)
Hospital admissions—cardiovascular (age > 18)	3,500 (2,500—4,200)	50 (35—61)	3,600 (2,500—4,200)
Emergency room visits for asthma (age < 18)	6,900 (3,500—10,000)	52 (27—78)	6,900 (3,600—10,000)
Acute bronchitis (age 8-12)	10,000 (-2,300—23,000)	250 (-57—560)	11,000 (-2,400—23,000)
Lower respiratory symptoms (age 7-14)	120,000 (47,000—200,000)	3,000 (1,100—4,800)	130,000 (48,000—200,000)
Upper respiratory symptoms (asthmatics age 9-18)	93,000 (17,000—170,000)	2,300 (420—4,100)	95,000 (18,000—170,000)
Asthma exacerbation (asthmatics 6-18)	110,000 (4,000—380,000)	2,700 (96—9,300)	120,000 (4,100—390,000)
Lost work days (ages 18-65)	830,000 (710,000—960,000)	20,000 (17,000—22,000)	850,000 (720,000—980,000)
Minor restricted-activity days	5,000,000 (4,000,000—5,900,000)	110,000 (94,000—140,000)	5,100,000 (4,100,000—6,000,000)

¹² Industry Letter to CARB dated June 16, 2010

(ages 18-65)

^a Estimates rounded to two significant figures; column values will not sum to total value.

^b The negative estimates for certain endpoints are the result of the weak statistical power of the study used to calculate these health impacts and do not suggest that increases in air pollution exposure result in decreased health impacts.¹³

The estimated reduction in premature death in the 10 Western States including California approximates 1.77% of the total in this table. This estimate verifies what Industry has been trying to tell the CARB for the last several years, to no avail. THERE IS NO DEATH EFFECT FROM DPM IN CALIFORNIA and the estimates of savings from the proposed regulations are nil.

This U.S. EPA study should put an end to CARB's regulations on DPM, period.

Appendix M

Here are a few recent examples of headlines from the Sacramento Bee over the last couple of weeks:

- Parks Funding Crisis Mounts
- Budget Woes Stress Out Locals
- Governor Gets Aggressive Against State's Many Debts
- Jobs, Services on Block
- City, County Explore Park Revenue Ideas
- Home Prices Still Falling: Low Prices Help Buyers But Hurt Builders
- Cash-Strapped Cities Seek Help From Nonprofits
- City Parks to Outline Plan for \$4.4 Million in Cuts
- Red Hawk Casino Debt is Piling Higher (even the Indian gambling casinos are affected).
- Council Will Compare Plans That Cut Fire, Parks, Police (how do you think that cutting fire and police services might affect health?)
- Budget Knife Aims at CSI Unit
- Can State Avoid The ugliest of Cuts
- Stockton Considers Bankruptcy

¹³ March 2011 US EPA Regulatory Impact Analysis of the Proposed Toxics Rule: Table 1-2. Estimate Reduction in Incidence of Adverse Health Effects in 2016 for the Proposed Toxics Rule.

