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## The Rationalist California's Diesel Regulations Are Hot Air

Henry I. Miller and James E. Enstrom 06.09.10, 6:00 PM ET

If you were strapped for cash and lived in North Dakota, would you spend money on hurricane insurance? That would be no dumber than the regulations of the California Air Resources Board, designed to reduce the form of "air pollution" known as diesel particulate matter. The scientific rationale for these enormously expensive regulations and the process by which they were enacted are dubious, and their costs impose a huge economic burden on the state. And since California is often regarded as a bellwether of environmental regulation, these rules could presage a disturbing national trend.

In July 2007 and December 2008 CARB, which is part of the California Environmental Protection Agency, approved wide-ranging regulation of off-road diesel vehicles and equipment ("Off-Road Rule") and on-road diesel vehicles ("Truck Rule"). These rules, which are being phased in over several years, apply to virtually all diesel engines in California. It is estimated that the cost of full implementation to the affected industries, primarily construction and trucking, will exceed \$10 billion. This will further burden the state's ailing economy, which already faces a \$20 billion-plus budget deficit, 12.5% unemployment and confiscatory taxes.

Given their astronomical costs and ripple effects--including the likelihood that other states will emulate California--it is essential to know how sound the rationale is for these regulations.

Consider the definition of "pollution." Pollution is the introduction of harmful substances or products into the environment. So is CARB's target indeed harmful? That is the \$10 billion question.

The primary evidence for harm is the small but statistically significant association found in a few national epidemiologic studies between total mortality and fine particulate air pollution (technically known as PM2.5, the very small-particulate soot that originates from diesel engines, forest fires, other sources of combustion and dust). Failing to appreciate the critical distinction between *association* and *causation*, CARB assumed that PM2.5 exposure *causes* higher mortality and leapt to the conclusion that 18,000 premature deaths per year in California are

associated with PM2.5 exposure, with 3,500 of these due to diesel particle matter. This is the primary rationale for reducing PM2.5 exposure.

However, both the data used by CARB to make its decisions and the integrity of its procedures are suspect. Several major studies fail to support a relationship between PM2.5 and total mortality (also known as premature deaths) in California. For example, a 2000 Health Effects Institute re-analysis of the 1995 American Cancer Society Cancer Prevention Study showed nationwide variation in PM2.5 mortality risk during 1982 through 1989, with little or no excess risk apparent in the western United States, including in California. In addition, a large 2005 UCLA study found no relationship between PM2.5 and total deaths in the California Cancer Prevention Study from 1983 to 2002; and a 2008 Johns Hopkins University study showed nationwide variation in PM2.5 mortality risk from 2000 to 2005 in U.S. Medicare enrollees, with no excess risk in California, Oregon or Washington.

Furthermore, key CARB research staff and CARB-funded scientists withheld or obfuscated epidemiologic findings that conflicted with their preconceived conclusions about PM2.5 health effects. In spite of the above null epidemiologic evidence and almost 150 pages of critical comments submitted to CARB in July 2008, the October 2008 Final CARB Staff Report (the "Tran Report," named after lead staffer Hien Tran) still claimed that PM2.5 and diesel particulate matter were responsible for the above-mentioned number of premature deaths, and in December 2008 CARB members unanimously approved the draconian Truck Rule.

Subsequently, the Truck Rule has come under intense scrutiny, with serious scientific, legal and economic objections raised in various forums. Notably, it was revealed that Tran lied about his academic credentials and that CARB chair Mary Nichols failed to inform all board members of this material misrepresentation prior to their vote. As a result, in November 2009 CARB member John Telles requested that the Truck Rule be set aside and asked for a reexamination of the science underlying CARB's actions.

At a February 2010 CARB symposium on the relationship between PM2.5 and premature deaths, many respected experts on PM2.5 expressed serious reservations about epidemiology, statistics, toxicology, economics, risk-benefit and access to data. All of these concerns are relevant to the validity of alleged PM2.5 health effects and to the justification for the CARB diesel regulations. In addition, the lead CARB-funded scientist, Michael Jerrett of the University of California, Berkeley, revealed that his detailed analysis of the American Cancer Society Cancer Prevention Study showed no relationship between PM2.5 and total deaths in California during 1982 to 2000. In other words, his results agreed with the null findings in the other studies cited above.

Thus, extensive evidence from several independent sources fails to demonstrate that PM2.5 causes premature deaths in California. In addition, PM2.5 levels in the state are currently the lowest ever recorded, and as of 2005 California had the sixth highest life expectancy and the fourth lowest age-adjusted total death rate in the U.S.

Given CARB's procedural irregularities, the lack of evidence that PM2.5 actually inflicts significant harm on Californians, and the huge financial burden that the regulations impose on the state's industries--one that will ultimately be passed along to consumers--CARB should suspend the rules and request a competent, independent reassessment of their scientific rationale. Otherwise, like vapor from a tailpipe, billions of dollars will vanish into thin air.

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## OPINION

### **REVIEW & OUTLOOK**

# California's Diesel Rule Scam

he Environmental Protection Agency and California Air Resources Board (CARB) are riding high after exposing Volkswagen's emission scam.

But the self-proclaimed guardians are running their own regulatory racket. See their shakedown of Virginia-based trucker Estes Express Lines.

Under the Clean Air Act,

the Golden State enjoys unique authority to impose stricter emission standards than the EPA, but only within its sovereign borders. Yet CARB exported its vehicle emission standards nationwide by forcing auto makers to re-engineer their fleets to state rules. Now the agency is trying to bring out-of-state truckers to heel.

In 2008 CARB banned diesel engines manufactured before 2010 from California roads. Under the rule, over a million truckers who operate in California, including 625,000 registered out of state, are required to replace their engines with a newer model or install a diesel particulate filter, which can cost more than their vehicles are worth.

This month CARB and EPA announced a \$390,000 settlement with Estes—\$100,000 of which goes to the U.S. Treasury—for failing to install filters on 73 of 500 trucks it operated in California between 2012 and 2014. Estes has since upgraded its entire California fleet.

CARB doesn't have authority to subpoena documents from out-of-state businesses, so EPA assisted the investigation by asserting jurisdiction under California's 2012 State Implementation Plan of the Clean Air Act that includes the truck rule. Last year EPA demanded that a dozen interstate trucking companies show com-

pliance with California's rule. A CARB spokesperson says the prosecution is "the first of what we hope are many cases." Caveat trucker.

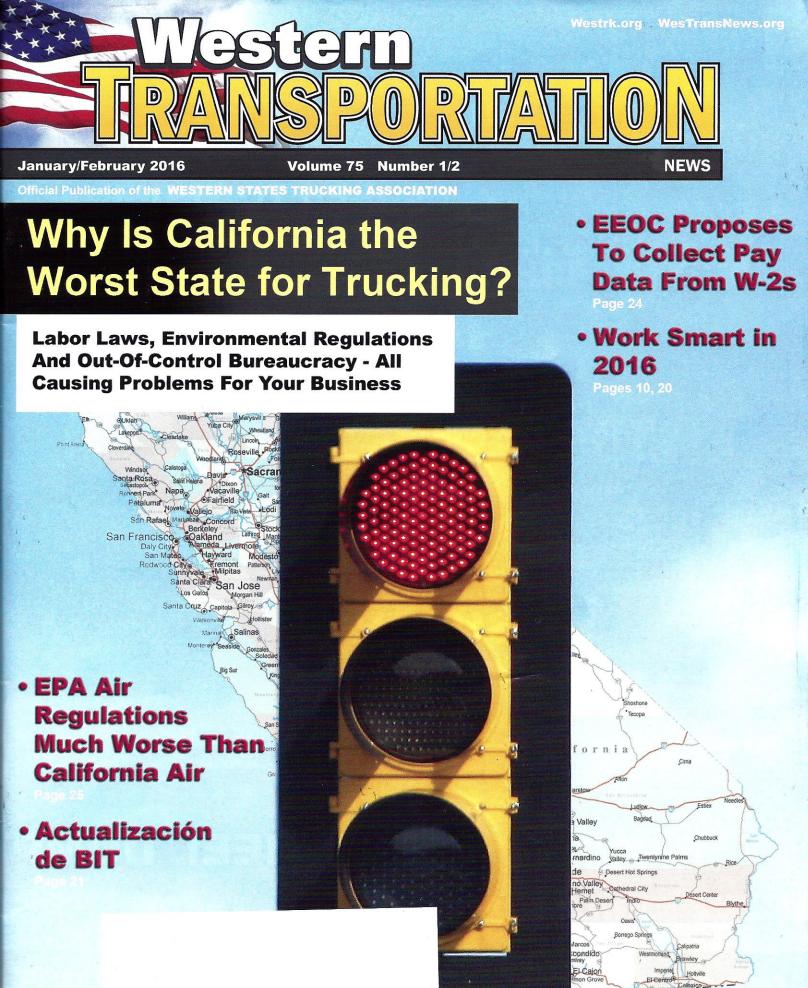
The state imposes a rule based on phony science on all U.S. truckers. Not surprisingly, the green police claim they are protecting Californians. According to EPA, the truck rule will prevent 3,500 premature deaths between 2010 and 2025. Yet there's little evidence linking

diesel particulate matter with an increase in mortality in California, which has among the lowest age-adjusted death rates in the country.

Studies show a weak association between mortality and particulate matter in Appalachia and the Midwest, but virtually no correlation in the western United States. This may be because the chemical composition of particulate matter—which can be generated from dust, wildfires, pollen, power plants, mining and farming—varies by region. Diesel exhaust makes up a small fraction of these fine airborne particles.

Notably, the epidemiological study that CARB used to justify its truck rule in 2008 had to be corrected after it was revealed that the report's lead staff scientist had purchased his statistics doctorate for \$1,000 from a diploma mill. CARB later revised its estimates of premature deaths prevented by the rule down to 3,500 from 9,400. After discovering the deceit, CARB Chairwoman Mary Nichols failed to inform the board and went ahead and propounded the regulations for adoption.

In other words, the regulations under which EPA and CARB are prosecuting truckers are based on dubious science. But when the cause is green virtue, such details don't matter.



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### EPA Air Regulations Much Worse Than California Air

By Steve Milloy, 2-1-16



The Environmental Protection Agency (EPA) has just given Southern California air pollution regulators a free hand to kill even more of the local economy. On January 13, EPA reclassified the Los Angeles area from "moderately" to "severely" out of compliance with EPA air quality rules. This reclassification will

require the local regulator, the South Coast Air Quality Management District (SCAQMD), to design a new plan to "improve" air quality.

While this may sound reasonable, it's not. Here's why.

The "air pollutant" of concern to EPA is fine particulate matter (PM2.5) – that is, soot and dust about one-twentieth the width of a human hair. While PM2.5 comes from smokestacks and tailpipes, it also comes from chimneys, forest fires, farms, trees and plants, mold and other sources.

PM2.5 is such a threat to public health that EPA didn't concern itself or the public with it until the mid-1990s when, after having exhausted the regulatory potential of larger particulate matter known as PM10, EPA decided to invent health risks from, and ensuing regulations for PM2.5.

Despite great scientific and cost-benefit controversy, EPA's first PM2.5 rules were finalized in 1997 and states were expected to implement them or face the sanction of being deprived of their federal highway funds. But before states could even implement EPA's PM2.5 and then evaluate the results, EPA was already off to the regulatory racetrack to make the PM2.5 rules even more stringent. EPA issued new PM2.5 rules in 2006 and then, again, in 2012. Meanwhile, areas like Southern California had never complied with the 1997 rules. The EPA's 2006 and 2012 standards put compliance even further out of reach.

But don't get the impression that California's air regulators have been sitting on their hands. The California Air Resources Board (CARB) got around to implementing EPA mandates in 2007 and 2008 when it issued PM2.5 emissions standards from diesel engines – rules estimated to cost the construction and trucking industries \$10 billion to comply with.

Those mandates were bad enough, but now EPA has determined that Southern California air is worse, implausibly meaning the \$10-billion in new clean trucks and equipment didn't really do anything to improve air. EPA is now ordering the local regulator (SCAQMD) to figure out new ways to crack down on PM2.5. This likely means additional targeting of the construction and trucking industries, warehousing and probably even wood burning fire places, especially at the beach. And this cycle is likely to continue worsening since the federal Clean Air Act requires that EPA continually review (translation: "tighten") air regulations every five years. Southern California air will, in effect, never catch up to EPA's needlessly stringent standards.

EPA asserts that the air in the south coast region made up of Los Angeles, Orange County and parts of western San Bernardino and Riverside Counties (although there has been SCAQMD jurisdiction "creep" into the eastern deserts) violates the EPA daily standard for PM2.5 in air. That standard is violated when air monitors report multiple readings in excess of 35 millionths of a gram PM2.5 per cubic meter of air for a single hour. Just a few such hourly monitoring violations on an annual basis are enough for EPA to declare an entire region out of compliance with EPA's standards.

South coast-area air may violate EPA standards as far as EPA is concerned, but it ought not to cause any health concern as far as commonsense is concerned. CARB maintains about 35 air monitoring stations in the Los Angeles area. So on an annual basis, there are 12,775 daily readings from all the monitors. The number of daily violations of the EPA daily PM2.5 standard out of all 12,775 readings in 2015 was 185. That means that Los Angeles area air was out of compliance with the EPA daily standard a mere 1.4% of the time as measured by the PM2.5 monitors.

So is it really worth saddling the economy in just this area with additional billions of dollars in unnecessary regulatory costs to further reduce PM2.5? Further consider that no one knows precisely what caused the air quality "problems" that were responsible for the 185 air monitor readings to temporarily register the out-of-compliance values. It could be anything from fires, to Santa Ana windblown dust to vehicle tire dust to who knows what. And that means that new SCAQMD rules will wind up arbitrarily cracking down on sources (like construction, trucking, warehousing and wood burning fireplaces) that may not be the cause in the first place.

Underlying all this, of course, is the reality that PM2.5 poses no demonstrable health risks to anyone. As discussed in a previous article ("Why Does Industry Keep Ignoring the Treasure Trove of Data Against EPA PM2.5 Claims," *West-ern Transportation News*, November/December 2015), EPA has used junk science to conclude that there is no safe level of exposure to PM2.5, thereby justifying endless tightening of air quality standards. Instead of looking out for the welfare of its citizens and the economy they depend on, California regulators have eagerly and mindlessly embraced EPA's regulatory onslaught.

In his 2007 book *Air Quality in America: A Dose of Reality on Air Pollution Levels, Trends and Health Risk*, air quality expert Joe Schwartz wrote, "Not surprisingly, no matter how clean the air (and water) gets, the EPA/CARB/ SCAQMD and all those that depend on green largess, continue to find unacceptable risks mostly based on junk science like CARB's PM regulations or CASAC's ozone research. The EPA and state regulators' powers and budgets, as well as those of environmentalist, depend on a continued public perception that there is a serious problem to solve. Yet regulators are also major funders of the health research intended CONTINUED ON NEXT PAGE

## **California's Road Funding** Worse Than You Think

While the legislative special session is continuing to search for a way to raise funding to fix California's crumbling roads and bridges, there is another problem lurking in the weeds-the state's main road fund, the gas tax-is going to go DOWN, for the third year in a row.

The given a complex set of legislative, regulatory and market forces, the explanation for this isn't simple, but we're going to give it a shot. Here's the main thing the construction industry should know-money going into the state highway trust fund is going to continue to drop, but it won't drop as much as the decline in oil prices would indicate.

#### Here's Why

It started in the Oughts (2000-2009) when the state · went through a series of schemes to try to get more money for roads:

•Raise the motor fuel tax to 18-cents per gallon in 2002 •An increase in vehicle registration fees that led to the recall of Governor Gray Davis;

•Deals with Indian tribe casino owners;

•A constitutional amendment that locked the sales tax o fuels to the highway trust fund;

•A \$19.6 billion bond issue to provide supplemental funding:

•And \$2.5 billion in federal "stimulus" money for "shovel-ready projects."

#### CONTINUED FROM PREVIOUS PAGE

to demonstrate the need for more regulation. They also provide millions (if not now billions) of dollars a year to environmental groups, which use the money to augment public fear of pollution and seek increases in regulators' powers. These conflicts of interest largely explain the ubiquitous exaggeration of air pollution levels and risks, even as air quality has steadily improved to the point that they are more than safe."

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So what can be done?

In addition to the political changes Californians so desperately need, concerned citizens and businesses ought to get involved in the SCAQMD regulatory process. EPA has set a deadline of December 31, 2019 for SCAQMD to develop a new air quality plan. That process will likely begin in the very near future and presents an opportunity for people to participate and chalAir Quality Index adarate

None of these provided an ongoing source of revenue that state and local transportation planners could count on to fund on-going maintenance and needed system growth. Governor Jerry Brown has a visceral aversion to additional bond funding. Something has to give.

### Fuel Tax Swap to the "Rescue"

The handwriting was on the wall (see Daniel, Chapter 5) for California's highway program by 2010. Both the governor and legislature had to come up with an on-going source of funding or face the voters locked in traffic on broken roads. A group of highway builders and their trade unions had been noodling an idea of getting rid of the sales tax on fuels (after they spent \$50 million to preserve in the Prop. 42 ballot initiative) and replace it with a big (but "revenue neutral" so as not to trigger the two-thirds vote requirements for a tax hike) increase in the fuel tax, indexed to inflation.

It seemed to be the silver bullet for the state and the idea of a "Fuel Tax Swap" was enacted by Assembly Bill x8-6 (Chapter 11, Statutes of 2010), Senate Bill 70 (Chapter 9, Statutes of 2010), and Assembly Bill 105 (Chapter 6, Statutes of 2011).

The Fuel Tax Swap provided for a combination of lowering the sales/use tax rate on motor vehicle fuel, excluding aviation gasoline and simultaneously raising the state excise fuel tax, effective July 1, 2010. Additionally, the Fuel Tax Swap raised the sales tax rate applicable to sales of diesel fuel and simultaneously lowered the state excise tax on diesel the same day. CONTINUED ON PAGE ACROSS

lenge the coming crackdown with science and economics.

We all want clean and safe air quality and the good news is we already have it. The EPA-CARB-SCAQMD air quality regulatory regime is a house-of-cards from a scientific, economic and commonsense standpoint. Nevertheless, blowing it down will take more than just a few of us.

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# Orange County Register March 1, 2016

**Opinion** 

# California the worst state to keep on truckin'

March 1, 2016 Updated 12:00 a.m.

#### By ORANGE COUNTY REGISTER EDITORIAL

As if we needed another example of how bad California's business climate is, a new survey concludes that the Golden State is the worst state in the nation for trucking.

The survey of "Best and Worst States for Trucking in 2016" was conducted by Merchant Cash USA, which offers cash advances to small businesses. Rounding out the bottom five were Virginia, Ohio, New Jersey and Massachusetts. Topping the list was Tennessee, followed by Washington, Oklahoma, Texas and Indiana.

Despite a booming trucking industry nationwide, California suffers due to environmental and labor regulations that drive up the costs of fuel and operations and make it difficult to hire drivers. This has caused an exodus of owner-operators with small carriers, who either "left the state or gave up their trucks," Scott Chatten of J.B. Hunt Transport told the Victorville Daily Press.

In particular, the California Air Resources Board's Statewide Truck and Bus Rule mandates that commercial trucks in the state have a diesel particulate filter, supposedly to improve air quality, though the regulation was based on discredited research. This has forced trucking businesses to either spend \$20,000 to \$50,000 to retrofit each truck or fork over even more to buy a new truck that meets the regulations. A new truck costs 60 percent more than it did in 2008, Merchant Cash USA noted.

To make matters worse, the filters are prone to clogging and have been blamed for at least 31 truck fires in the past two years, according to the Alliance for California Business.

A state law that requires workers to take a 30-minute meal break within the first five hours of a work day has also been a hindrance. "Can you imagine driving from the High Desert to Albuquerque and pulling off in the middle of nowhere to take your 30-minute break?" one owner-operator said to the Daily Press.

The destruction of the trucking industry in California will no doubt give some environmentalists reason to cheer, but it needlessly costs desperately needed jobs and inhibits economic growth – all to further an ideological agenda unsupported by evidence.