Los Angeles Times

Diesel Exhaust Found to Pose Strong Cancer Risk; Air: State must decide whether to declare fumes a toxic threat requiring safeguards. Business leaders attack report.; [Home Edition]

MARLA CONE. Los Angeles Times. Los Angeles, Calif.: Apr 23, 1998. pg. 1

Abstract (Summary)

Capping nearly a decade of debate, a state panel of scientists Wednesday decided that diesel exhaust poses a serious cancer danger and urged state environmental officials to take steps to protect public health.

The implications of the long-awaited decision are great, not only in terms of people's health, but also the economy. State environmental officials must wrestle with how to reduce the hazards posed by diesel-powered vehicles, which are so commonplace that they transport virtually every product that Californians consume.

The scientists estimated that 14,850 Californians now living could eventually die of disease caused by diesel exhaust. Over a lifetime, exposure to diesel pollution will cause 450 lung cancers among every 1 million people exposed, the scientists estimate, making diesel exhaust a highly potent carcinogen.

Full Text (1012 words)

(Copyright, The Times Mirror Company; Los Angeles Times 1998 all Rights reserved)

Capping nearly a decade of debate, a state panel of scientists Wednesday decided that diesel exhaust poses a serious cancer danger and urged state environmental officials to take steps to protect public health.

The implications of the long-awaited decision are great, not only in terms of people's health, but also the economy. State environmental officials must wrestle with how to reduce the hazards posed by diesel-powered vehicles, which are so commonplace that they transport virtually every product that Californians consume.

Because of that, how to handle diesel pollution is now among the biggest issues facing the California Air Resources Board, which must start deciding this summer how to respond to the scientists' recommendation.

The scientists estimated that 14,850 Californians now living could eventually die of disease caused by diesel exhaust. Over a lifetime, exposure to diesel pollution will cause 450 lung cancers among every 1 million people exposed, the scientists estimate, making diesel exhaust a highly potent carcinogen.

Residents of the Los Angeles Basin are breathing the worst diesel fumes in the state, about 60% more than the average level the scientists used to estimate the cancer risk.

UCLA toxicologist John Froines, who chairs the group of nine scientists, called Wednesday's decision the "most important" public health issue that the scientific panel has addressed since it was formed by the Legislature 15 years ago.

"If you believe these risk numbers at all, diesel has a significant impact on the health of Californians," Froines said. "This {exhaust} is without a doubt the most toxic set of constituents that you could ever find."

Diesel exhaust is a brew of thousands of gases and particles, including more than 40 compounds, such as benzene, dioxins and formaldehyde, that have already been declared carcinogenic.

But the economic implications of protecting the public against diesel pollution are also great.

California industries fear that the recommendation could be the first step toward elimination of diesel engines, which power not only heavy-duty trucks and buses but also trains, ships, construction and farm equipment, and industrial generators.

Air board officials say they have no intention of banning diesel. But they may consider tighter standards that would force more engine modifications and encourage use of natural gas and other alternatives. They also have the option of deciding that existing measures already do enough to safeguard the public.

Diesel engines are already substantially cleaner than a decade ago--emissions are scheduled to decline 85% between 1990 and 2010--so the Air Resources Board faces a dilemma of how to cut additional pollution.

The board is expected to decide in July whether to act on the scientists' recommendations and declare diesel fumes a toxic threat. Board members are expected to accept the scientists' advice. If so, the state will need to devise a strategy to safeguard Californians from the tons of hazardous compounds spewed by trucks, buses, ships and other diesel equipment.

The state Scientific Review Panel's unanimous decision was a major defeat for the trucking industry and the California Chamber of Commerce, which orchestrated a high-profile campaign to keep diesel off the state's list of cancer-causing air pollutants.

Alan Zaremberg, president of the California Chamber of Commerce, called diesel "the backbone of our nation's transportation infrastructure and our economy."

Complicating matters, auto makers and the U.S. Department of Energy recently began developing new sport utility vehicles that run on diesel fuel instead of gasoline, because diesel has better fuel efficiency and emits lower amounts of gases linked to global warming.

The scientists and state environmental officials have spent an inordinate length of time--nine years--reviewing diesel exhaust. The first report recommending action against diesel came in 1994. But, under fire from industry groups, the state staff and scientific panel revised it twice, each time toning down the language in describing the cancer threat.

Froines said it has been the longest and most hotly contested review even though there is more scientific evidence linking diesel to disease than any of the other 19 contaminants already declared toxic.

"There are big stakes in this, so we want to do it right," Froines said. "But the science very clearly shows that diesel exhaust should be identified as a toxic air contaminant."

The scientists said more than 30 human health studies provide strong support for concluding that diesel causes lung cancer. The studies show that railroad crews and other workers regularly exposed to the fumes suffered a 40% average increase in lung cancer, the panel concluded. Also, in laboratory tests, the exhaust causes gene mutations, cell damage and lung tumors.

Among scientists, the debate focuses not on whether diesel exhaust causes cancer--most agree that it probably does--but on how big a threat it poses to the general population.

The panel of academics struggled to assess the cancer danger that Californians are exposed to driving down freeways, waiting at bus stops and doing other routine activities. Using the cancers suffered by workers breathing large amounts of fumes to extrapolate the risk for people who breathe far less is a highly uncertain scientific endeavor.

Industry groups attacked the estimated number of cancers linked to diesel as "junk" science, especially since the numbers kept changing. Some scientists have also questioned the estimate because of the great uncertainty.

Trucking company owners worry that identifying diesel as a carcinogen will increase their liability in lawsuits filed by people who contract cancer.

"We're suggesting that the science they used is extremely flawed," said Beau Biller of the California Trucking Assn. "This is an advocacy document. This is not pure science."

Biller said the state has refused to reveal all the raw scientific data, adding that there is no data showing that the amount of exhaust people breathe "in the ambient air, as they walk down the street" causes cancer. "This obviously isn't fully cooked, and it's just bizarre that this is going to have such an impact on our industry. . . . There really is no alternative to diesel right now."

In addition to lung cancer, workers exposed to diesel exhaust can suffer allergies, asthma, loss of lung function and bronchitis, health studies show.

Los Angeles Times URL: http://www.latimes.com/

ProQuest document ID: 28940780

Document URL: http://proquest.umi.com/pqdweb?

did=28940780&sid=1&Fmt=3&clientId=1564&RQT=309&VName=PQD

Los Angeles Times Archive for Friday, July 31, 1998

Air Board Delays Vote on Hazards of Diesel Fumes

By Marla Cone

July 31, 1998 in print edition A-3

From truckers to farmers to manufacturers, industry leaders descended Thursday on the California Air Resources Board in an effort to stop the board from declaring diesel exhaust a potent cancer-causing danger to the public.

The board heard six hours of public debate but delayed its long-awaited decision at the request of topranking state legislators until late August. A Senate hearing will be held next week on the economic and environmental ramifications of diesel fuel.

The delay comes after an independent panel of scientists and state environmental officials have spent nine years—an inordinate length of time—reviewing the health effects of diesel exhaust to judge whether it should be deemed a toxic air contaminant.

Despite the lobbying, the air board is still expected to declare diesel exhaust toxic. State officials would then need to consider strategies to ensure that Californians are protected from the hazards posed by trucks, buses, trains, farm machines and other equipment that burns diesel fuel. Air board officials say that they would not ban diesels, but they are likely to tighten standards for exhaust and fuel. That would include increased efforts to prompt trucking companies, bus fleets and others to remove their dirtiest diesel vehicles from the roads.

The issue has been one of the most contentious decisions before the Air Resources Board in recent years, largely because diesel plays such a central role in the state's economy.

On behalf of industry, 66 state legislators—more than half the Legislature—intervened and urged Gov. Pete Wilson's air quality chief, John Dunlap, to delay the board's decision. Senate Transportation Committee Chairman Quentin L. Kopp (I-San Francisco) is holding a hearing Tuesday at the urging of the California Trucking Assn., a powerful lobby of trucking companies.

On Thursday, industry representatives, environmentalists and scientists spent the day debating the link between diesel exhaust and lung cancer and the implications for California's economy and public health.

Trucking companies and engine manufacturers worry that if the air board implicates diesel exhaust as a potent carcinogen, they could be held liable for paying massive damages for causing people's cancers. Even without an outright ban on diesel, the air board's decision would make it difficult to operate a wide variety of businesses that depend on the engines, from grocery stores to construction firms, industry officials say.

"Diesel engines are an integral part of our economy in California, so what you do here may have a significant effect," said Allan Zarember, president of the California Chamber of Commerce. "In some circumstances, the consequences may be worse than the cure."

Diesel fumes are substantially cleaner than a decade ago. New engines—those produced since 1988—emit 90% fewer of the tiny particles that can lodge in lungs than earlier, unregulated diesel engines.

But environmentalists, backed by state and independent scientists, argue that even the cleaner diesels still endanger public health. In California, the engines emit about 27,000 tons a year of tiny sootlike particles that can lodge in lungs.

"We're very concerned that people in California who are exposed to diesel may die," said Paul Knepprath of the American Lung Assn.

Scientists and state officials say there is little doubt that diesel exhaust qualifies as a toxic air contaminant. Under a 1983 California law, the air board must identify a substance as toxic, then consider steps to protect the public, if it "may cause or contribute to an increase in mortality or serious disease" or "may pose a present or potential hazard to human health."

State environmental officials first recommended that diesel exhaust be listed as toxic in 1994, but under fire from industry, their report was revised twice.

In April, the state's Scientific Review Panel concluded that diesels could be killing more than 14,000 Californians by causing 450 lung cancers among every 1 million people exposed to average concentrations over a lifetime. Based on that risk estimate, diesel exhaust ranks sixth in potency of 19 air pollutants now identified as hazardous.

More than 30 human health studies from around the world show a link between diesel exhaust and cancer—more so than with any other substance reviewed by the state in 15 years, said John Froines, a leading environmental health specialist at UCLA who heads the Scientific Review Panel. In the studies, railroad crews and other workers regularly exposed to large doses of the fumes suffered 40% more lung cancer than average.

Engine manufacturers and other industry groups argue that the studies are flawed, especially because they involved workers exposed several decades ago, before improved engines and low-sulfur fuel reduced the particles and other toxic ingredients in the exhaust.

The crux of the debate is over the state's effort to quantify the cancer threat to all Californians.

Most scientists agree that diesel exhaust does increase cancer in many occupational settings in which people breathe high concentrations.

Diesel exhaust contains a mix of thousands of compounds, including more than 40 that have been declared carcinogenic.

But some scientists say that the California scientific panel has gone too far out on a limb by estimating the number of cancers among people in the general population—who are exposed just from breathing ambient air while driving on freeways, walking near intersections, or sitting at bus stops.

Industry representatives say that if the state board adopts the cancer estimate, it makes the science sound conclusive when it remains highly uncertain because of holes in the research.

"Something with this huge of an implication for the economy of the state of California should not be a back-of-the-envelope calculation," said William Bunn, medical director of Navistar International, the largest diesel engine manufacturer. "Before you say ambient air causes cancer, you should be very certain, and we don't think that evidence is there."

http://articles.latimes.com/1998/jul/31/news/mn-8918

California and the West; Board Declares Diesel Soot a Cancer-Causing Pollutant; Health: The compromise comes after a years-long debate. It sets in motion a process to try to figure out how to deal with the emissions of the toxic particulates.; [Home Edition] *MARLA CONE*. Los Angeles Times. Los Angeles, Calif.: Aug 28, 1998. pg. 3

Abstract (Summary)

Diesel soot--the culprit behind the smoke from trucks and buses that annoys many Californians--is a toxic, cancer-causing danger to the public, the state's air quality board declared in a unanimous vote Thursday.

Now, the real work begins for the state Air Resources Board. In a process likely to take years, the agency must evaluate strategies to protect Californians from the fine carbon particles emitted by diesel engines, including those in trucks, tractors and trains.

Earlier this week, industry groups, from trucking companies to oil giants, agreed to end their years of intense opposition to air board action on diesel so long as the board identified only diesel particulates--not diesel exhaust as a whole--as a toxic pollutant.

Full Text (576 words)

(Copyright, The Times Mirror Company; Los Angeles Times 1998 all Rights reserved)

Diesel soot--the culprit behind the smoke from trucks and buses that annoys many Californians--is a toxic, cancer-causing danger to the public, the state's air quality board declared in a unanimous vote Thursday.

The decision, which set in place an unusual compromise between industry and environmentalists, ended nearly 10 years of political debate and scientific analysis by state officials and a panel of scientists.

Now, the real work begins for the state Air Resources Board. In a process likely to take years, the agency must evaluate strategies to protect Californians from the fine carbon particles emitted by diesel engines, including those in trucks, tractors and trains.

Air board Chairman John Dunlap assured business leaders that banning diesel engines or fuel is not an option.

Instead, the air board voted to create a working group of health experts, industry leaders and environmentalists who will help devise a plan that is likely to focus on tightening emission standards for future vehicles and finding ways to get rid of old, smoking trucks.

Ending years of confrontation, environmentalists and industry groups Thursday endorsed the move to list diesel particulates as a toxic air contaminant.

"This is a really important step and we're very pleased," said Linda Waade of the environmental group Coalition for Clean Air. "After nine years, I absolutely believe that it starts the clock ticking and we'll see some really good {policy} out of this. There will be no new regulation immediately, but it starts this very important risk-evaluation process."

Earlier this week, industry groups, from trucking companies to oil giants, agreed to end their years of intense opposition to air board action on diesel so long as the board identified only diesel particulates--not diesel exhaust as a whole--as a toxic pollutant.

The main difference, business leaders say, is that the board is giving them something specific to focus on--finding new technologies to reduce the particles created by diesel engines.

Particulates are microscopic pieces of soot that contain molecules of various toxic compounds and can penetrate deep into lungs. The particles are believed to cause serious respiratory problems.

California Chamber of Commerce President Allan Zaremberg called it a "win-win situation" and a "fair compromise."

Board member Joseph Calhoun, a former General Motors engineer, said he had "lost some sleep" over the prospect of voting to identify diesel exhaust as toxic. But he found it more reasonable to act only on diesel particulates--the ingredient that health studies, engineers and regulators have focused on.

Already, under existing emission standards, a new diesel truck or bus emits 90% fewer particles than one manufactured a decade ago. Many trucks on the road, though, are still putting out large amounts of smoke because the engines are older models.

Despite the years-long delay brought by industry opposition, Dunlap said California is now ahead of the curve. The U.S. Environmental Protection Agency is evaluating diesel exhaust and is likely to declare it a carcinogen.

Since 1989, debate has centered on how much of a cancer risk diesel poses to people driving on freeways, riding on buses, living near trucking centers or simply breathing urban air.

A state-appointed panel of scientists concluded that diesel pollution could be causing 14,000 cases of lung cancer in California. But that cancer estimate is highly controversial and uncertain because it is extrapolated to the general population from studies that found a high cancer rate among railroad crews, truckers and other workers who encounter high doses of exhaust.

ProQuest document ID: 33480494

Document URL:

http://proquest.umi.com/pqdweb?did=33480494&sid=1&Fmt=3&clientId=1564&RQT=309&VName=PQD