https://www.indybay.org/newsitems/2015/01/02/18766263.php

California | Education & Student Activism

NO on SB 5 Vidak

unless amended

by Charlie Peters / – fax: 9675 /

Friday Jan 2nd, 2015 11:45 AM

Governor Brown Jr.
SB5 Vidak
AB 32 Pavley
Truck fuel

Lower ozone and pm might result from a GMO fuel ethanol waiver to improve 2015 AB 32 performance

Officials know that ethanol is carcinogenic. Should the attorney general request a conversation with EPA about a waiver of the ethanol mandate?

AB 32 opinion

http://www.youtube.com/watch?v=ZI-Nrep74qg

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CAPP contact: Charlie Peters

Clean Air Performance Professionals

Hayward, California 94541
Fax: 510-537-9675
December 24, 2014

NO on SB 5 (Vidak), unless amended

SUPPORT: ethanol waiver, Smog Check PZEV performance audit with an end to alcohol CAFÉ mileage credits

IMPROVE AB-32 performance in 2015 with federal ozone regulation compliance

Officials know ethanol is a human carcinogen

STOP "Wallet flushing" ethanol car tax

Clean Air Performance Professionals (CAPP), an award winning coalition of motorists
cc: interested parties

CAPP contact: Charlie Peters

Tom Berryhill and Kristin Olsen Among Co-Authors of SB5 to Stop California Gas Tax Hike

CA State Senator Andy Vidak, Sierra Sun Times, 03-Dec-14

December 1, 2014 - Sacramento – Senator Andy Vidak (R-Hanford) today introduced Senate Bill 5, which would stop the permanent hike in gas prices that could range from 16 to 76 cents per gallon every time Californians fill up beginning January 1, 2015. Assemblyman Jim Patterson (R-Fresno) introduced a companion measure, Assembly Bill 23, today, as well.

"Sacramento bureaucrats need to understand that gas is not a luxury, it's essential to get to work, to get your kids to school," said Vidak. "Where I live people are still standing in food lines. This is going to hurt the folks that can't afford it the most."

The California Air Resources Board (CARB) secretly created the new assessment fee on gas without public knowledge or legislative approval. Beginning January 1, 2015, the CARB mandate will require companies that sell transportation to comply with the cap-and-trade program regulation.

SB 5 would exempt transportation fuels—including gasoline, diesel, and natural gas—from the state's cap-and-trade program so that Californians will not be gouged at the pump.

"Nowhere else are gas prices going up than in California," said Vid

SB 5 co-authors include: Senators

Joel Anderson (R-San Diego)
Tom Berryhill (R-Twain Harte)
Jean Fuller (R-Bakersfield)
Bob Huff (R-Diamond Bar)
Mike Morrell (R-Rancho Cucamonga)
Jim Nielsen (R-Gerber)
Jeff Stone (R-Temecula)

Assemblymembers:

Travis Allen (R-Huntington Beach)
Bill Brough (R-Dana Point)
Ling Ling Chang (R-Diamond Bar)
Beth Gaines (R-Roseville)
Shannon Grove (R-Bakersfield)
Young Kim (R-Fullerton)
Eric Linder (R-Corona)
Brian Maienschein (R-San Diego)
Devon Mathes (R-Visalia)
Chad Mayes (R-Yucca Valley)
Melissa Melendez (R-Lake Elsinore)
Jay Obernolte (R-Hesperia)
Assembly Republican Leader Kristen Olsen (Modesto)
Jim Patterson (R-Fresno)
Marc Steinorth (R-Rancho Cucamonga)
Dave Wagner (R-Irvine)
Marie Waldron (R-Escondido)
Scott Wilk (R-Santa Clarita)

Source: California State Senator Andy Vidak

http://goldrushcam.com/sierrasuntimes/index.php/news/local-news/1636-tom-berryhill-and-kristin-olsen-among-co-authors-of-sb5-to-stop-california-gas-tax-hike

Contribute

(snip)

If you wish to pay by check instead of credit card, please remit to Vidak for Senate 2014. Then, as required by law, print and complete the form above except for the credit card information and mail to: Vidak for Senate 2014, P.O. Box 984, Willows, CA 95988.

Political contributions are not deductible for income tax purposes. The maximum legal contribution per cycle is $4,100 per individual or $8,200 per couple (there are two cycles per election). Corporate contributions are permissible. Spouses and adult children may each give $4,100 by separate checks or credit card transactions. Foreign nationals are prohibited from making contributions to this committee unless they have permanent residency status in the United States.

Paid for by Vidak for Senate 2014:: ID #1359757

(snip)

https://www.efundraisingconnections.com/c/AndyVidak/

CAPP contact: Charlie Peters

Legislation That Affects The Collector Car Hobby

SB 1, SB 5 & AB 23

California Global Warming Solutions Act of 2006: market-based compliance mechanisms: exemption. (Introduced: 12/1/2014)

Please contact your representative today in both the Assembly and the Senate to voice your support of the above legislation. If this hidden tax is not stopped we will all being paying more for fuel; groceries; not to mention just about everthing else we buy...

http://capitolcitycruisers.org/leg.htm

NO on above bills, unless amended

Officials know ethanol is a human carcinogen

CAPP contact: Charlie Peters

A New Crop of Laws for 2015

By Glenn Barr, Reporter, Mountain-News, January 1, 2015

Gov. Edmund G. Brown had a busy pen in 2014, signing more than 900 bills into law. Though many were of a technical nature, several will have significant impacts on workers, employers, drivers, consumers and the medical profession.

Perhaps the new law with the broadest application and the deepest financial impact will be the new tax on gasoline, which motorists will begin paying today.

The tax, which will add anywhere from 10 to 70 cents per gallon, depending on who you ask, is an extension of the California Global Warming Solutions Act (AB32), which former Gov. Arnold Schwarzenegger signed in 2006.

The law's aim was to reduce the level of greenhouse gases emitted in California to 1990 levels by the year 2020. Beginning today, the law covers gasoline; in the past, the so-called cap-and-trade law covered only large industrial facilities.

TAX RISE EXPECTED

The California Air Resources Board and other sources predict the law will generate about $2 billion a year, or about 12 cents per gallon initially, with tax amounts to rise over time. The idea behind including gasoline under the umbrella of AB32 is that higher costs will discourage the use of petroleum-based fuels, resulting in cleaner air.

(snip)

http://www.mountain-news.com/news/article_913792f2-9144-11e4-b7da-33e3783c8040.html

Lower ozone and pm might result from a GMO fuel ethanol waiver to improve 2015 AB 32 performance

Officials know that ethanol is carcinogenic. Should the attorney general request a conversation with EPA about a waiver of the ethanol mandate?

CAPP contact: Charlie Peters

Contaminated Groundwater Wells Close In South Lake Tahoe

By Ky Plaskon, CAP Radio, November 12, 2014

Because of the drought, three wells in South Lake Tahoe have higher levels of contamination. Some wells have been shut-downs and the state of California is investigating.

In a drought there is less groundwater to dilute contaminants. In South Lake Tahoe, that's been a problem at three wells. The Lahontan Water Quality Control Board says two of the wells about a half mile west of Lake Tahoe have registered a known carcinogen at nine times allowable levels. The wells were shut down, leaving barely enough water for 950 homes. The California Water Resources Control Board has approved $69,000 to determine the contamination source.

Lahontan Board Geologist Lisa Dernbach says the contaminant PCE is usually associated with dry cleaning.

"But in this part of the town there are no current or recent dry cleaning business so we are suspecting it might be related to an engine repair facility."

Dembach says the source should be confirmed by mid-winter. Near Stateline the drought has resulted in contamination of a well with MTBE from a gas station. The station owner is purchasing bottled water for the motel that depends on the well.

http://www.capradio.org/articles/2014/11/12/contaminated-groundwater-wells-close-in-south-lake-tahoe/

Officials know ethanol is a human carcinogen

Dr. Stan's California water supply opinion

http://mediaarchives.gsradio.net/radioliberty/121213d.mp3

CAPP contact: Charlie Peters

AIR QUALITY: Smog worse in 2014

Late-season hot weather cooked up more ozone, more unhealthful days than last year.

David Danelski, Staff Writer, Riverside Press, October 9, 2014

Smog season 2014 just doesn't want to quit.

Thanks to continuing hot, stagnant weather, Southern California continued this week to have poor air quality, with pollution levels exceeding the federal health standard.

The total so far is 92 unhealthful days, and we're still counting. Our smoggy days are usually behind us by mid-September, but not this year. We've logged five unhealthful days just this week.

The tally is worse than 2013, which had 88 bad air days recorded at one or more of the 28 air pollution monitoring stations in Orange County and the urban portions of Los Angeles, Riverside and San Bernardino counties.

The culprit is ozone, a corrosive, unstable gas that forms when different kinds of air pollutants react with each other in Southern California's air basin between the Pacific Ocean and the San Bernardino Mountains.

Ozone irritates the moist tissues in the lungs, throat and other parts of the respiratory tract. It can cause nausea, headaches and runny noses, and it can trigger asthma attacks. It also has been linked to premature deaths among people who are frail.

Ozone concentrations tend to build up as air pollution drifts east with sea breezes and stalls at the mountains. Higher temperatures mean more ozone gets cooked up. And levels peak in the late afternoons.

Dr. Sunil Sinai, who operates asthma and allergy clinics in Upland, Fontana and San Dimas, said he has not seen a rash of asthma attacks, but added his patients are doing better job of protecting themselves.

"People are more aware," he said. "A lot of parents keep their (asthmatic) children indoors in the late afternoons."

He advises his patients to exercise in the morning when ozone levels are low, and to keep up with their medications.

In the Inland area, the worst ozone pollution was measured in Crestline, where 70 days exceeded the federal health standard of 75 parts of ozone per billion parts of air. Monitoring stations in Redlands, San Bernardino and Jurupa Valley recorded 55, 51 and 46 unhealthful days, respectively, so far this year.

Ozone forms when volatile organic compounds – fumes from substances such as gasoline, nail polishes and paint thinners – cook in sunlight and react with nitrogen oxide, a brownish

gas that is a byproduct of combustion mostly from cars and trucks.

The news isn't all bad.

Despite an uptick in number of bad air days this year, the air quality region is still showing long-term improvement, said Philip Fine, an assistant deputy executive officer for the South Coast Air Quality Management District.

In the 1970s and 1980s, it wasn't unusual for the ozone standard to be exceeded more than 200 days a year. And air quality officials frequently declared smog alerts compelling schoolchildren to stay indoors for recess.

Fine explained that our skies have gotten cleaner as we've replaced older motorized vehicles – ranging from ocean-going ships to mopeds – with new ones.

Federal and state regulations generally require new airplanes, locomotives, trucks, cars and other vehicles to meet ever stricter emissions limits, and air improves when older machines are replaced.

Yet the region will need to have nearly all its vehicles with zero emissions or low emissions if it is to meet a tough federal deadline to achieve healthful air for all by 2023, he said.

"The technology is there with battery-operated and hybrid vehicles," Fine said.

Fine also expects the air district to consider rules limiting smog-forming emissions from oil refineries, among other pollution sources, he said.

Contact the writer: 951-368-9471 or ddanelski@pe.com

http://www.pe.com/articles/air-751652-ozone-days.html

California Air Resources Board (CARB) Partial Zero Emissions Vehicle (PZEV) performance audit, and fuel ethanol waiver can result in Federal Environmental Protection Agency (FED EPA) ozone compliance in 2015.

Lower ozone and pm might result from a GMO fuel waiver to improve 2015 AB 32 performance at $billions in savings of "Wallet Flushing" car & fuel corporate welfare

Officials know that ethanol is carcinogenic. An ethanol cap and elimination of dual fuel CAFE credit can prevent 2000 tons per day of sulfur, PM, HC, O3, NOx, CO & CO2.

CAPP contact: Charlie Peters

Children of the corn subsidies

By Debra J. Saunders, San Francisco Chronicle, 17-Dec-13

Sen. Dianne Feinstein, D-Calif., and Tom Coburn, R-Okla., are about as opposite politically as two people can be. Nonetheless, last week they joined forces to introduce a bill to repeal the federal requirement to blend corn ethanol into gasoline.

There's something in the ethanol mandate for almost everyone - but corn farmers - not to like. Supporters of the mandate meant well, but the law of unintended consequences has created an odd assortment of anti-ethanol bedfellows.

Environmentalists have turned on corn ethanol. It doesn't reduce greenhouse gases, they now say, and increased corn production has pumped more fertilizer into the water supply. Environmental Working Group Vice President Scott Faber told Congress that the corn ethanol Renewable Fuel Standard "is polluting America's air and water, contributing to climate change, hurting consumers and hindering the development of cleaner biofuels."

Big Oil doesn't like the ethanol standard. Federal automobile fuel-efficiency regulations have put a dent in the demand for gasoline. Oil companies already buy enough ethanol to blend 10 percent of it into gasoline; they are up against a "blend wall" - they have to buy more ethanol than they can use.

Big Food doesn't like the ethanol mandate; diverting roughly 44 percent of the corn supply to gas tanks has driven up the cost of livestock feed and people food.

PricewaterhouseCoopers predicts the current renewable-fuel standards will increase costs to chain restaurants by up to $3.1 billion per year. Antipoverty activists oppose the ethanol standard because of its effect on food prices and food supply. Oxfam America charges that the 2007 regulation has resulted in a 15 percent reduction in global corn supplies.

The Competitive Enterprise Institute and Taxpayers for Common Sense support the Feinstein-Coburn Corn Ethanol Mandate Elimination Act of 2013.

According to conventional political wisdom, the Iowa presidential caucus has given ethanol an outsize advantage inside Washington. But the Environmental Working Group's Faber believes that theory doesn't hold water anymore. Former GOP nominees John McCain and Mitt Romney both opposed the scheme.

While voters in the Hawkeye State may support the Renewable Fuel Standard, Faber added, "corn ethanol is unbelievably unpopular" in three key primary states. In New Hampshire, voters blame it for engine damage. In South Carolina, it drives up the cost of raising chickens. There's "not a lot of corn grown in Nevada," but there is livestock.

In response to the growing resentment of the program, the EPA has proposed reducing the Renewable Fuel Standard's biofuels requirement in 2014. That's too little, too late. Feinstein predicts that under the proposed EPA regulations, gasoline prices still would rise, and California dairy farms still would struggle to stay in business.

Maybe there was a time when Washington's ethanol policies seemed smart and green. Now they carry the stench of failed ranches, high food prices and unnecessary environmental damage. So Congress should clean up after its mistake - and quickly.

http://www.sfgate.com/opinion/saunders/article/Children-of-the-corn-subsidies-5069954.php

Officials know that ethanol is carcinogenic. Should the attorney general request a conversation with EPA about a waiver of the ethanol mandate?

CAPP contact: Charlie Peters

Sen. Flake Cosponsors Legislation to Eliminate Corn Ethanol Mandate

Senator Jeff Flake, Political News, December 15, 2013

Washington, D.C. – United States Sen. Jeff Flake (R-AZ), today joined Sens. Tom Coburn (R-OK), Dianne Feinstein (D-CA) and seven other cosponsors to introduce The Corn Ethanol Mandate Elimination Act of 2013.

The bill eliminates the corn ethanol mandate within the Renewable Fuel Standard (RFS), which requires a yearly increase in the amount of renewable fuel that must be blended into the total volume of gasoline refined and consumed in the United States.

The RFS, which was first enacted in 2005 and then expanded in 2007, requires refiners and blenders to use 16.55 billion gallons of renewable fuel in 2013.

"In 2005, Congress bought into the corn ethanol mandate for billions of dollars, and taxpayers have been stuck with a lemon ever since," said Flake. "Congress can no longer justify a policy that props up the ethanol industry at the expense of taxpayers, consumers, the hungry and the environment. I am pleased to join my colleagues on both sides of the aisle in supporting the full and immediate repeal of the corn ethanol mandate."

The bill is also cosponsored by Sens. Richard Burr (R-NC), Susan Collins (R-ME), Bob Corker, (R-TN), Kay Hagan (D-NC), Joe Manchin (D-WV), Jim Risch (R-ID) and Patrick Toomey (R-PA).

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http://politicalnews.me/?id=26192

"Bob Dudley, who runs BP, told me that people don't realize how many resources his company has. The oil and gas industry is global and powerful and it's not something beholden to any particular president, Congress or well-meaning regulation."

Washington Post, Friday, March 16, 2012

CAPP contact: Charlie Peters

Toxic Legacy Sets the Stage for a Ghost Town

By Chris Richard, California Report, April 2, 2013

Nearly 20 years ago, Pacific Gas & Electric paid hundreds of millions of dollars to settle legal claims that it had poisoned the Mojave Desert community of Hinkley by dumping industrial waste into the ground.

But that David and Goliath triumph -- portrayed in the movie "Erin Brockovich" -- didn't last. Since then, a plume of groundwater contaminated with toxic chromium-6 has continued to spread, and the town is emptying.

Sonja Pellerin's first- and second-grade classroom at Hinkley Elementary School is a lively and brightly colored place. Each time Pellerin gives an instruction to the class, she punctuates the instruction by clapping her hands. And the children, leaning forward eagerly, their eyes on Pellerin's face, clap along with her.

For a recent vocabulary lesson, it was business as usual.

"Class, please describe to your partner what a downpour would look like," Pellerin said, her voice and face cheerful.

She clapped her hands. "Switch! Go!"

The children, absorbed in the lesson, clapped in response and turned to their partners, chattering. That gave Pellerin a moment to step away from the front of the class. As she did, her face grew grave.

"We're learning every day different areas the kids are moving to now and we've had many, many tears," she said. "Some people have lived here for generations, and it is turning families upside down."

With enrollment falling sharply for several years, Barstow Unified School District trustees say they can't afford to keep the Hinkley School open on their own. But for the rest of the academic year, the Hinkley School will continue to be a community gathering place. Once a month, the school invites families to share lunch with their children. Roberta Walker came here recently to be with her grandchildren. She's angry that PG&E refused a district request to buy the Hinkley School in order to keep it open. "The school was the biggest, biggest part of the community," she said. "And they refused to admit that they were at fault for the decline in enrollment."

In the 1990s, Walker was the lead plaintiff in a lawsuit by residents alleging that PG&E had dumped cooling water from a natural gas compression plant south of town into unlined ponds. The waste, laden with toxic chromium-6, contaminated Hinkley's wells, and the suit blamed the company for widespread cancer and autoimmune disease. The company paid $333 million to settle the case. Much of the money went to attorneys, with the balance divided among 600 plaintiffs.

With her share of the money, Walker built new homes for herself and her daughters about four miles north of the compression plant. She believed that, under a state cleanup order, PG&E would contain the poison. Now, chromium-6 has turned up in her water again. Walker and her daughters are negotiating sale terms with the company.

"There's still that little hope that the state will continue pushing along, but am I gonna do it? And once I leave, and once I get out of here, am I going to?" she said. "No. I'm not. I'm tired. I'm done."

PG&E already has agreed to buy out a third of Hinkley's residents. And the company has spent some $700 million trying to clean up its mess. That has included pumping millions of gallons of water a year and spreading it on fields to let microbes break down the poison. The company is also pumping ethanol into the ground to trigger a chemical reaction that neutralizes the chromium. At a public meeting in October, project engineer Kevin Sullivan tried to offer encouragement.

"We're making a lot of progress," he said. "We've cleaned up like 54 acres. Now, I know that doesn't. ... I, I, believe me, I

understand that if it's not your property, you know, 'What have you done for me lately?' But 54 acres is a lot of progress."

It's only a fraction of the environmental damage. Three years ago, state water quality officials estimated the contamination plume at a little more than 2 1/2 miles long. According to the most recent state report, it might now be more than 7 miles long, and spreading at 2 feet per day.

"It seems like the more we look, the more we're finding, and it's something that is, um, is scary for folks," said Lauri Kemper, assistant executive officer of the Lahontan Regional Water Quality Control Board, the state agency overseeing cleanup efforts.

Frightening as the pollution is, until recently 83-year-old Patsy Morris was determined to stay. She remembered the Mulberry Street neighborhood of her youth, when the houses had green lawns and her children played up and down the block.

Today, the few neighbors who remain have turned off their wells for fear of the chromium. The grass is gone. Most houses are boarded up, and Morris tries to resign herself to leaving.

"You get a bitterness about the whole thing. They're just going to make this a big dust bowl, that's all I can say about it," Morris said "My friends are leaving, one way or another. It gets you, you know?"

PG&E spokesman Jeff Smith has said repeatedly over the years that the company wants to make sure Hinkley survives. But that's getting more complicated.

"We certainly remain committed to working with the people of Hinkley. If their preference is to have their property purchased and to depart from the community, we want to make sure we have that option available to them as well," he said.

In a community so small, one loss flows into another. Hinkley is losing its fire department, too. Four of the department's six members are negotiating the sale of their homes to PG&E, including Fire Capt. Julie Heggenberger.

Her mother was the town nurse. Her father founded the volunteer fire department. By contrast, Heggenberger's husband moved repeatedly as a child.

"By the time we got married, he was like, 'I never want to leave. I don't want to do that!' " she said.

Heggenberger's eyes filled with tears. She swallowed hard, struggling to speak clearly.

"'I want to raise our children, have them grow up in the same school, live in the same house.'"

But both of Heggenberger's parents died of diseases she blames on the contaminated water. A brother is seriously ill. She herself has Crohn's disease. Heggenberger and her husband feel that for their children's safety, they have no choice but to move away. Still, leaving this place he came to call home is very hard for her husband.

"He never had that. And it's what I had," she said. "And he's seen it was what made me a person in the community. And, um, we're not going to have that."

PG&E estimates it take could another 40 years to get rid of the pollution. That draws grim laughter from people in Hinkley. They predict their community will be a ghost town in less than 10.

http://audio.californiareport.org/archive/R20130402085O/b

Officials know ethanol is a human carcinogen, the contamination plume is a little more than 2 1/2 miles long. According to the most recent state report, it might now be more than 7 miles long, and spreading at 2 feet per day.

CAPP contact: Charlie Peters

EPA told to reconsider California ethanol waiver request

By Harry Cline, Western Farm Press, July 22, 2003

California contends its refineries can make clean-burning gasoline without oxygenates such as ethanol or MTBE. In fact, California's Sen. Diane Feinstein contends ethanol's volatility may be the cause for increasing smog levels in Southern California since the waiver was denied and more ethanol was added to the state's gasoline supply.

However, the director of the Renewable Energy Action Project contends it was the weather and not ethanol that was the cause of a sharp increase in Southern California smog levels this year.

The court ruling and Feinstein's call for a study of ethanol's impact on smog set off more volleys between Feinstein and others in California and Midwest corn interest over whether Californians should be required to burn ethanol made from corn in their cars and light trcks.

The Bush administration cited the Clean Air Act in rejecting California's request for an oxygenate waiver in June 2001. The most liberal appeals court in the nation said recently it was the Bush administration that violated the clean air act when "the EPA abused its discretion by refusing to evaluate the effect that an oxygen waiver would have on California's efforts to comply. We accordingly remand this case to the EPA with instructions to give full consideration to the effect of a waiver on both the ozone and pollutant standards."

Called heartening

Feinstein said it is "heartening" for the court to make the EPA reconsider its denial of California's requested waiver from requirements that call for 2 percent of its reformulated gasoline to include an oxygenate. Since MTBE is soon to be banned, the only viable oxygenate is ethanol. California produces only miniscule amounts of ethanol. There have been propositions to increase ethanol production from non-corn byproducts in the wake of the EPA denial of the California's waiver, but to date the majority of California's ethanol supplies continue to be imported, mostly from corn producing Midwestern states.

California farmers generally favor ethanol production because it would reduce Midwest corn supplies and bolster prices for California corn and other commodities that compete with corn. However, California fuel prices are among the highest in the nation and anything to cause them to go higher is not popular.

An EPA reversal to approve the California waiver request would be a setback to the ethanol/renewable fuel industry since California represents the biggest ethanol market in the nation.

However, the National Corn Growers Association says the court ruling by the San Francisco court of appeals substantiating EPA's actions supporting ethanol is not a setback for renewable fuels.

Decision reaffirmation

"While some may see this decision as a loss for ethanol, in reality, the EPA's original decision was reaffirmed," said Jon Doggett, the NCGA's vice president of public policy. "The court said EPA should also have looked at the impact on national ambient air quality standards. We are comfortable with the issues being remanded back to EPA. We are on the verge of obtaining a national renewable fuels standard, and we don't view this as a setback.

"The ruling furthers the ethanol industry's ability to move into a new market without disruption of supply," says Doggett. "It will also provide for a healthier environment in California."

Not necessarily, according to Feinstein who said the waiver denial not only sent pump prices skyrocketing to record levels it also worsened air quality as California refineries transition to ethanol from MTBE. MTBE will be banned after June 1 next year because it has been found in groundwater.

Ethanol is now blended into almost 70 percent of California's gasoline supply and the "transition continues without significant problems," according to the Renewable Fuels Association (RFA).

A study earlier this year by the California Energy Commission said unexpected refinery outages and longer than expected refinery

maintenance — both unrelated to the switch to ethanol — combined with tight gasoline supplies and high world crude oil prices to produce record high retail gasoline prices in California. RFA says the cost of ethanol had nothing to do with record prices averaging more than $2 per gallon.

Price down, but...

California gasoline prices have declined from an average of $2.15 per gallon in March to about $1.75 in July. However, that is still 23 cents higher than the national average. Most of that is added California taxes.

Recently, Feinstein asked the EPA and the California Air Resources Board to investigate the impact of ethanol-blended gasoline on California's air quality.

She said air quality in the South Coast Air Quality Management Zone has gotten worse this year compared to last and "the switch to ethanol-blended gasoline is considered one of the main culprits in increased ozone."

So far this summer, she said the district has already experienced 35 days above the federal ozone standard in 2003.

"This is worrisome because there were only 21 days exceeding the federal ozone standard in 2002. So far in 2003 the maximum ozone measured was 216 parts per billion (ppb) while in 2002 the maximum was 169 ppb. Moreover, for the first time in five years, Southern California experienced a Stage 1 smog alert on Friday June 11, 2003."

"Since ethanol's volatility increases smog, particularly in the summer, I believe we need to look carefully at its impact on air quality," said the senator.

The issue has already been addressed, according to Brooke Coleman, director of the Renewal Energy Action Project, a national coalition of environmentalists, private foundations, government agencies and renewable energy advocates.

'Way off base'

In a sharply worded response to Feinstein's anti-ethanol comments, Coleman said the senator was "way off base in targeting the renewable fuel industry."

Coleman said ethanol does not impact gasoline volatility and the main culprit in the ozone increases has been "meteorological changes," according to the South Coast Air Quality Management District's model. Other factors, added Coleman, include an "unanticipated increase in the number of SUVs and miles driven."

Coleman accused the senator of skewing the debate toward Midwestern wealth and alleged pump price increases while ignoring the fact ethanol is cheaper than gasoline; safer than other alternatives to MTBE and reduces "California's alarming consumption of fossil fuels."

Coleman said Feinstein's "attacks on ethanol" are doing the oil and automobile industries "a great favor by distracting Californians from the true source of smog in urban areas; increased auto emissions.

"The problem with California's air is not ethanol. Ethanol is part of the solution," Coleman charged.

With energy bills in the House and Senate including an ethanol mandate almost tripling the amount of ethanol used in the nation's gas supply, Feinstein "strongly believe that we should know more about ethanol's impact on air quality in California.

Feinstein is seeking an investigation by the state of California to find what role increased ethanol use is having on current higher smog levels.

Under the provisions contained in the Senate energy bill, the U.S. would be required to use 5 billion gallons of ethanol by 2012.

Feinstein reiterated that California can meet clean air standards without ethanol or MTBE.

"California's own clean air and reformulated gasoline requirements are the most stringent in the nation and would continue to be in effect, even if a waiver were granted," Feinstein said.

http://westernfarmpress.com/epa-told-reconsider-california-ethanol-waiver-request

A California fuel ethanol waiver and elimination of the duel fuel CAFÉ credit can cut the mobil fleet ozone and pm impact 50% in 2015.

CAPP contact: Charlie Peters

Top Ten Facts about Ethanol

By James S. White, CAL Gasoline

* 1 Ethanol is listed as a known human carcinogen by the International Agency for Research on Cancer.

* 2 The cost of Reformulated Gasoline with ethanol will increase 3-6 cents per gallons compared to RFG with MTBE.

* 3. Spills of pure ethanol or gasoline containing ethanol from leaking storage tanks can create a benzene plume up to 150% larger than a spill from a non-ethanol fuel.

* 4 Ethanol cannot be shipped by pipeline because of its high affinity for water posing significant distribution costs and hurdles for gasoline blenders.

* 5 According to a study by Cornell University, for every gallon of ethanol produced, 1.4 gallons of energy is consumed in the process, compared to 0.15 gallons used in the manufacture of gasoline.

* 6 It takes 1.5 gallons of ethanol (E-85) to drive as many miles as one gallon of gasoline.

* 7 Every gallon of ethanol removes 53 cents from the Federal Highway Trust Fund because of a special tax break for producers.

* 8 Ethanol increases the vapor pressure of gasoline by 1 psi. resulting in higher evaporative emissions of Volatile Organic Compounds, while tailpipe emissions of Acetaldehyde increase 150%.

* 9 Ethanol permeates the hoses and lines of automobile fuel systems resulting in a 50% increase in VOC emissions for pre 1995 cars.

* 10 Ethanol dissolves oxide scale from the walls of pipes and tanks, subjecting the systems to internal corrosion, which leads to leaks

http://www.calgasoline.com/facttopten.htm

CAPP contact: Charlie Peters

The Bait and Switch, Hemmings Motor News, August 2002

In January 2001, California introduced legislation (AB-1058) to require the state Air Resources Board (CARB) to develop and adopt regulations to achieve the maximum feasible and cost effective reductions of greenhouse gasses emitted by motor vehicles.

As of June 28, 2002 AB-1058, also known as the global warming bill, was stalled in the Assembly. Many residents of California had let their representatives know that they didn't want a bill that could take away vehicle choice, impose taxes and subject them to regulations from a bureaucracy. But as the public prepared for their fourth of July vacations the Legislature found an innocuous bill entitled Assembly Bill 1493, which originally dealt with state audits and had nothing to do with emissions. They then proceeded to do what is called a "gut and amend" and remove all the existing language of AB-1493 and replace it with the language of AB-1058, the bill authored by ex-school teacher Fran Pavley to limit CO2 emissions from cars and trucks.

But the public was sidestepped by effectively renaming the bill AB-1493 and rushed it through the Legislature in a matter of two business days. After Friday's "gut and amend," the bill was sent to the Senate floor Saturday night, where it passed in a matter of minutes without any discussion, debate or the customary committee oversight, as the big topic of controversy was the California budget with its $24 billion deficit.

It came back to the Assembly on, Monday morning, July 1, and was referred to the Transportation Committee, which held a non-noticed public hearing (effectively non-public hearing) in a room the size of your average dining room. It wasn't in the open; it was in a closed room that was inaccessible to the general public. The public didn't have a chance to make their views known. It passed out of committee then it was brought to the floor under another procedure called a WORF (without reference to file). A WORF allows a bill to be brought to the floor without public notice that it was going to be heard. It was brought to the floor where it passed with the minimum vote required. There has been much mis-information as to the bill going to the Governors desk to await his signature. The bill is still sitting at the Assembly desk.

CAPP President, Charlie Peters reported that "Senator Quentin Kopp informed him in January of 1993 that Remote Sensing technology was in the wings to replace the current Smog Check inspections. June 26th CARB held a workshop for another "Pilot Study" on remote sensing. Will this affect the old cars? You Bet! Old cars are NOT exempt from remote sensing."

"Last month, the Speaker of the Assembly's Chief of Staff John Stevens also mentioned that a deal with the Global Warming Bill and the bill to place San Francisco motorists into the Smog Check II Program was under consideration by Senator Burton. It will be interesting to see what happens regarding support for the Smog Check II Bill (AB-2637) now that AB-1493 has moved."

"In my opinion, the "big" global warming game is a shift from oil and internal combustion engines to bio-fuels and fuel cells. Oil is quick and cheap to bring to market and therefore the market cannot easily be controlled. Bio-fuels and fuel cells, however, are the result of government funded public/private partnerships which can control who gets to be a player and how much fuel is available."

"The Pew Charitable Trust's global warming partnerships with business http://www.pewclimate.org/belc appear to support the credit trading money game that can, if it is allowed to continue to develop along its present course, eliminate any market competition, in effect, confiscating the market. Bio-fuel/fuel cell carbon tax games may very possibly generate a privatized rapid transit business that can make the devastation of ENRON's energy activities look like a Sunday school picnic."

Sources say, It is prophetic that AB-1493's passage by the Legislature occurred during the week of July Fourth, Independence Day!

More next month ... Stella

CAPP contact: Charlie Peters

California Scheming

By Christopher C. Hormer, Free Republic, 25 April 2002

The Washington Post first reported internal memos revealing that the vocal "global warming" movement and its 1997 Kyoto Protocol were fruit of a stealthy and extensive corporate lobbying campaign. The ringleader? Enron (surprise!). The memos disclosed that "green" groups were courted, funded and even created to spread the gospel that man is killing the planet by burning fossil fuels, a malady Enron offered to mitigate through its natural gas, windmill and solar ventures.

Now similar schemes, cloaking issues in green to garner political influence and economic advantage, are arising in the market for fueling America's automobility.

In California, which excluded coal from its electricity mix thus leading to its embarrassing, expensive, and dangerous summer of 2001, corporate interests are seeking to exploit green values to set a heightened, specific requirement for a particular gasoline additive, notwithstanding its well-documented environmental (and economic) downsides.

Incredibly, California's legislature again is lending a helping hand.

The Post's initial revelation of the corporate-funded Kyoto campaign involved a torrent of internal memos, including Enron's dictation of the need and content for an international treaty restricting energy use emissions. Among them was the 1996 internal Enron memo which included the sub-heading: "Making sure there is a treaty," detailing high-level meetings with Clinton administration officials. Oval Office meetings followed soon thereafter.

Enron's chief "warming" salesman, John Palmisano, provided a damning post-Kyoto assessment in another internal memo, in which he wrote: "If implemented, this agreement will do more to promote Enron's business than will almost any other regulatory initiative outside of restructuring of the energy and natural gas industries in Europe and the United States." The memo went on that the Kyoto deal was "exactly what I have been lobbying for," "it seems like we won," "again, we won," and "another victory for us". It closed: "This agreement will be good for Enron stock!!"

Well, Enron, for obvious reasons doesn't have the clout it used to. But riding in the "global warming" wake it helped create, the ethanol lobby is riding on, led by the all-time political influence and corporate pork king, Archer Daniels Midland (ADM).

Sniffing the potential of what wooed legislators and regulators can award them but actual competition never would provide, this special interest appears to have scored big in California. And it smacks of Enron's exposed campaign of fronting "green" groups to fuel its greedy agenda.

In the waning hours of the recently concluded legislative session, the Assembly passed AB 1058. That bill required California's Air Resources Board to adopt regulations yielding the "maximum feasible" reduction in carbon

dioxide (CO2) emissions from passenger cars and trucks. CO2 is a naturally occurring gas. A small percentage (approximately .03) of the world's total is produced by releasing fossil-based energy through combustion.

The principal component of human breath, CO2 is also consumed by plants to produce oxygen. As such it obviously has no ill human health effects as long as, like with any ambient gas, you don't try breathing it exclusively. It does, however, pose tremendous business opportunities for new, high cost boutique fuels. But because of their higher energy costs, which hit seniors and the poor particularly hard, related fuel interests appreciate environmental claims such as "catastrophic global warming" being accepted. Hence industry's stealth green campaigns. There is a lot of money to be made by making the world a poorer place through energy suppression policies.

And that's where ethanol, the highly toxic gasoline additive derived from corn, comes into play.

Ethanol has serious fuel performance, production, logistical, and price problems dwarfing even those of the demonized MTBE. According to a 1994 affidavit sworn and filed in federal litigation, then-California Secretary of Environment Don Strock said that by "[a]dding ethanol to gasoline ... the State would suffer increases in ozone, particulate matter, oxides of nitrogen (NOx), and a loss of carbon monoxide (CO) emission reduction benefits."

No objective environmental assessment of ethanol supports its use.

Yet, the California Senate is poised to consider the "climate" legislation desired by the ethanol lobby, currently rushing it through committees. Until cars requiring no hydrocarbons become "feasible" (quite possibly never), AB 1058 would seemingly require that gasoline contain a hefty dose of the "oxygenate" produced from corn.

Why? Well, according to energy trade reporters in California, those wacky ethanol boys are up to their "ears" in this.

As bad as the corporate scheming is the environmental groups that stand behind the effort. According to the Associated Press, a group calling itself Bluewater Network is this bill's green face. Who are they? Well, Bluewater is a self-described "project of the Earth Island Institute" (EII). And as some readers may recall, EII on its website dismissed overly mourning the 9/11 tragedies in this fashion: "The majority of the victims were, unfortunately, working for the Pentagon and various elements of multinational financial empires." Bet you never knew those people deserved it.

It is time that legislators and regulators stop adopting fashionable eco-scare campaigns, until they at least learn what interests are actually behind each one. There is a good reason elected citizens, not corporate CEOs, make policy.

http://www.freerepublic.com/focus/news/1546409/posts

A random 'Smog Check' inspection & repair 'secret shopper' audit, ethanol cap and elimination of dual fuel CAFE credit can cut California car impact over 50% in 2015. (Prevent Over 2000 tons per day of sulfur, PM, HC, O3, NOx, CO & CO2.) Improved performance of AB32 at reduced cost.

CAPP contact: Charlie Peters [illegible]

The Fight Over Mandates

By Stella Sez, Hemmings Motor News, July 2000

In a letter sent to the Assistant Administer of the Environmental Protection Agency, Robert Perciasepe, the Renewable Fuels Association (RFA) urged the EPA to deny California's request for a waiver from the federal reformulated gasoline (RFG) oxygen standard, "because their request fails to demonstrate that fuels without oxygenates, like ethanol, improve air quality."

Meanwhile, US Senator Peter G. Fitzgerald (R-Illinois) is urging that lawmakers designate $14 million for a Southern Illinois University (SIU) ethanol facility. After more than a decade of pleas by the farm community and unsuccessful appropriations battles in Congress, the national ethanol research plant at SIU may become a reality. (Does Colorado already have a federally funded ethanol facility?) The final version of this year's crop of insurance reform bills will provide full federal funding for the project, if it is approved by Congress.

However, it has been reported by the Lake Tahoe "Daily Tribune" that ethanol is polluting Lake Tahoe's groundwater. Earlier this year, ethanol replaced MTBE in all reformulated gasoline sold in and around Lake Tahoe. Ethanol has been detected in Lake Tahoe's groundwater at concentrations as high as 130,000 parts per billion (ppb).

Is Ethanol A Cancer Risk?

Unlike MTBE, little is known about the impacts of ethanol releases into groundwater or the environment. However, because ethanol is the primary ingredient of beverage alcohol, which is classified by the California Proposition 65 Committee and other cancer experts as a human carcinogen, many are concerned about the possibility that ethanol may pose a cancer risk. Additionally, independent researchers have determined that ethanol in groundwater can extend plumes of other more potent gasoline carcinogens (benzene, toluene, etc.) up to 25%. In addition, ethanol is less effective than MTBE at fighting air pollution, and due to transportation and supply problems, will likely increase gasoline prices.

Additional reports are concerned about the high sulfur content of gasoline. The auto industry is calling on CARB and EPA to lower sulfur levels. The sulfur content of denatured ethanol is receiving increased attention as politicians and refiners simultaneously attempt to lower MTBE and sulfur levels in the gasoline pool. The topic received considerable attention during a California Air Resources Board (CARB) workshop in April on CaRFG3. CAPP President Charlie Peters attended the workshop and according to a presentation given there, sulfur levels in ethanol, once denatured, are being called into question. CaRFG3 calls for 20 ppm of sulfur. CARB requested samples because reports are that ethanol may contain between 60-160 ppm of sulfur.

Recently, the National Institute for Environmental Health Sciences (NIEHS) released its congressionally mandated report on cancer-causing substances. The report declined to list MTBE as a cancer-causing agent or as an agent likely to cause cancer, however, but did add ethanol-based beverage alcohol to the list of known carcinogens.

"Super Clean Gasoline"

"Super Clean Gasoline" is on it's way to many gas stations. This month, a new type of reformulated, smog-reducing gas will be required in Boston, New York, Washington, Philadelphia, Houston, Dallas, Chicago and other major cities. The EPA predicts that the new fuel will cost up to two cents a gallon more than conventional gas to produce, and the costs will be passed on at the pump. But even before this new gasoline is introduced, the battle to delay it's introduction has been waged. The EPA has rejected requests for a temporary waiver from Illinois and Wisconsin. The EPA recently awarded a temporary waiver to St. Louis as pipeline problems restricted supply of the new grade to the area. Does the "new" RFG 2 have MTBE in it, or ethanol? I asked that question of Mr. Donald Bea of the Inspection and Maintenance Review Committee (IMRC). He told me the 2% oxygenate mandate is still in place. He also said the RFG 2 has lower sulfur and lower Reid Vapor Pressure (RVP). Mr. Bea also mentioned that because of the lower RVP required in the Northeast, ethanol may not be used.

In New York, Governor George Pataki signed two major environmental initiatives into law, including a ban on MTBE that has polluted underground water supplies. According to the "New York Times" article, "Mr. Pataki also signed legislation that tries to limit the amount of pollutants that now drift into New York from coal-burning power plants in

Midwestern and Southern states, causing acid rain. The measure seeks to stop New York companies from selling pollution allowances. The credits, essentially the right to pollute, are awarded to companies that cut their own emissions below a federal standard. The credits are now sold on the open market, usually to utilities with older power plants that find it cheaper to buy such credits instead of modernizing their plants and cutting their emissions.

"The new law calls for the state to seize all proceeds that a New York utility makes from selling its credits to polluters in the Midwest and the South. The law allows state regulators to impose a fine equal to the amount of such a sale; the fine would be used to promote development and the use of nonpolluting energy sources like solar power. The law limiting pollution credits goes into effect immediately, and the ban on MTBE is to take effect in January 2004."

Beware Of The Texas Emission Patrol

The first wave of Houston-area vehicle owners is scheduled to appear in justice-of-the-peace courts to explain why they didn't obey letters ordering them to have their vehicles tested for excessive emissions. Commuters in the Dallas-Fort Worth area also have been summoned to court. The citations were issued in May after random roadway tests, conducted since the end of 1998, detected vehicles that emitted excessive pollutants. The owners, identified by their license plate numbers, were sent letters directing them to have their vehicles inspected at an emission-testing station. Thus far, 125 people have received citations for failing to heed the letters, a criminal violation that carries a fine of up to $350.

The Texas Legislature ordered random roadway testing of cars in 1995 after lawmakers abandoned a plan that would have required regular emissions testing for vehicles in Harris and its surrounding counties. The 1995 decision was viewed as a compromise to spare commuters who live outside Harris County the burden of having their vehicles undergo annual emissions testing. The remote testing, done from a van at random locations that commuters use, is conducted by a contractor who uses a sensing unit, a camera and a device that measures a vehicle's speed and acceleration.

Charlie Peters and I attended the IMRC meeting at the California Air Resources Board hearing room in Sacramento on May 31. This meeting was of special interest, as the subject was Smog Check evaluation report to the Governor and Legislature. The reports done by the IMRC and CARB/BAR were reported to be based on many assumptions as well as computer models. The perception created appeared to be an attempt to resolve differences between the reports. CARB seems to support separation of test and repair and the IMRC supports remote sensing, creating a debate between A and B: remote sensing and separation of test and repair. Some options under consideration CARB mentioned (to comply with the perceived shortfall of meeting the State Implementation Plan [SIP]), were: putting 1966 to 1973 cars back into the program (goodbye SB-42); more stringent cut points to increase effectiveness; increasing the cut points halfway between current cut points and what is required in the SIP. A chart showing SIP hydrocarbon cut points are more stringent for older cars than newer cars. I will report more on this next month.

HALT In The Name Of The Law

No more high-speed police pursuits, ever. That is the goal of a new technology demonstrated during the California Peace Officers Association's annual conference. The device is cunningly dubbed "High speed Avoidance using Laser Technology," or HALT. If implanted in cars, the small microsensor would allow police with a remote control laser gun to force motorists to a slow, safe stop from up to half a mile away.

The sensor would be embedded near the license plate, giving officers something to aim at. Implanting the device into a new car would cost about $20. Retrofitting cars already on the streets with the sensors would cost about $100. California sources reported that it was mentioned on the evening news that you would not be able to re-register your vehicle unless you had this installed!

Last but not least, the Pennsylvania Newspaper Association, a non- profit organization representing 300 publications, filed a "friend of the court" brief supporting the contention that Commonwealth Court erred in concluding that documents concerning the state's $145 million settlement with Envirotest Inc. did not constitute "public records." The California company had been contracted to build and operate auto emissions-testing centers throughout Pennsylvania; the Ridge administration agreed to the buyout after canceling the contract. The case is scheduled for September.

https://www.indybay.org/newsitems/2012/04/22/18711820.php

Ethanol, MTBE polluting Lake Tahoe

Oil & Gas Journal, June 26, 2000

Plagued by leaks of both ethanol and methyl tertiary butyl ether (MTBE) from gasoline service stations that are polluting groundwater sources, the Lake Tahoe, Calif., resort area is headed into another summer of water use restrictions.

Earlier this year, California officials ordered that ethanol replace MTBE in all reformulated gasoline sold around Lake Tahoe. Traces of MTBE were found in tests of groundwater sources in that area in September 1998, forcing the South Tahoe Public Utility District (STPUD) to shut in 12 of its 34 wells, or 27% of the water supply for area residents.

Now ethanol also is showing up in water tests, in concentrations as high as 130,000 ppb. That quickly prompted a near "I-told-you-so" response from the Oxygenated Fuels Association Inc., a trade group of fuel-additive manufacturers based in Arlington, Va.

"We have said all along that you ·nnot blame a single component asoline leaks from ndard tanks. But our groundwater resources are too precious, and the problem of leaking underground storage tanks is too serious for us to say 'I told you so.' Still, the fact that ethanol has replaced MTBE in Lake Tahoe and is now in the groundwater speaks for itself," said Charles Drevna, government affairs director for the association.

Some claim ethanol moves through groundwater faster and in a less predictable fashion than MTBE. But MTBE is detectable by its offensive taste and smell in much smaller quantities, as little as 2 ppb, said Dennis Cocking, STPUD spokesman.

He said El Dorado County officials are asking the state to ban use of all oxygenates in gasoline sold in that area.

Leaking storage tanks

Actually, the double-walled underground tanks at service stations in the Lake Tahoe area are holding up well, Cocking said.

The leaks are occurring at valves and elbows of lines connecting the the pump outlets at the stations.

The response by gasoline suppliersand station operators has been mixed, he said. Big companies "like Shell, Chevron, and Tosco" moved quickly to halt the use of MTBE and to try to remedy the problem, he said.

But "six or seven independents" were slow to move until the El Dorado County board of directors last month implemented a criminal law banning MTBE.

That is probably the first law in the US to criminalize use of MTBE, Cocking said.

The water utility district serves a base area population of some 30,000 people. But that population escalates to about 200,000 during the summer as people flock to the scenic mountain lake.

Tourist trade has not yet been affected because the utility district shut in the polluted wells before MTBE or ethanol could get into the public water system, Cocking said. But loss of 12 wells eliminated the utility district's excess supply, leaving it just enough water to meet peak demand.

As part of the area's standard conservation effort even before the pollution was discovered, restaurants were serving water to diners only on request, and hotels were encouraging guests to reuse towels to reduce laundry.

Last summer, local officials implemented additional restrictions, primarily limiting watering of lawns and other outdoor irrigation on a schedule of even or odd days. Similar restrictions will be implemented this summer, said Cocking.

Local authorities are still mulling over possible cleanup efforts. "The trouble is, the remediation technology hasn't caught up with the problem," said Cocking. "But I have faith in the enterprise system that the situation will change."

Meanwhile, a civil lawsuit is pending in US District Court in San Francisco against refiners, station operators, and "anyone else who might be involved" in the Lake Tahoe pollution.

http://www.ogj.com/articles/print/volume-98/issue-26/processing/ethanol-mtbe-polluting-lake-tahoe.html

Dr. Stan's California water supply opinion

http://mediaarchives.gsradio.net/radioliberty/121213d.mp3

CAPP contact: Charlie Peters [redacted]

Ethanol Contaminating Ground Water in Lake Tahoe; Detections Prove That Fuel Storage Tanks - Not MTBE - Are to Blame For Tainted Water.

ARLINGTON, Va., May 8, (2000) /PRNewswire/ --

South Tahoe Public Utility District ("STPUD") spokesman Dennis Cocking, acknowledged in a report by the Tahoe Daily Tribune (April 28, 2000) that ethanol is polluting Lake Tahoe's groundwater. Earlier this year, ethanol replaced MTBE in all reformulated gasoline sold in and around Lake Tahoe after opponents of MTBE blamed it for gasoline leaks from fuel storage tanks that tainted groundwater in the area.

The Tahoe Daily Tribune reported earlier this year (March 24), that ethanol has been detected in Lake Tahoe's groundwater at concentrations as high as 130,000 parts per billion. The Tribune account also quotes a Lahontan Regional Water Quality Control Board official who acknowledges that ethanol moves faster through groundwater and in a less predictable fashion than MTBE.

Charles Drevna of the Oxygenated Fuels Association commented, "We have said all along that you cannot blame a single component for gasoline leaks from substandard tanks. But our groundwater resources are too precious and the problem of leaking underground storage tanks is too serious for us to say 'I told you so.' Still, the fact that ethanol has replaced MTBE in Lake Tahoe and is now in groundwater, speaks for itself."

Unlike MTBE which is one of the most studied chemicals in commerce today, little is known about the impacts of ethanol releases into groundwater or the environment. However, because ethanol is the primary ingredient of beverage alcohol, which is classified by the California Proposition 65 Committee and other cancer experts as a human carcinogen, many are concerned about the possibility that ethanol may pose a cancer risk. Additionally, independent researchers have determined that ethanol in groundwater can extend plumes of other more potent gasoline carcinogens (benzene, toluene, etc.) up to 25%.

Both California Governor Gray Davis and Senator Richard Mountjoy (R-Arcadia) have called for further study of ethanol to determine the health risks posed by its contamination of groundwater. Recently however, California Senate Bill 1972, which would have mandated a comprehensive study of ethanol by the University of California, was defeated in the Environment Committee of the California State Senate.

In addition to its potential adverse health effects, studies have shown that, as a component of cleaner burning gasoline, ethanol is less effective than MTBE at fighting air pollution and due to transportation and supply problems, will likely increase gasoline prices.

The Oxygenated Fuels Association is an international trade association incorporated in 1983 to advance knowledge about the use of oxygenated fuel additives which improve the combustion performance of motor vehicle fuels, thereby significantly reducing automobile emissions and air pollution.

http://www.thefreelibrary.com/Ethanol+Contaminating+Ground+Water+in+Lake+Tahoe%3b+Detections+Prove+...-a061938659

Officials know ethanol is a human carcinogen

CAPP contact: Charlie Peters

From newtimesla.com
Originally published by New Times L.A. Jan 14, 1999

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Troubled Water

The gasoline additive MTBE was supposed to "drive away" L.A.'s smog. Instead, it ruined drinking water across California.

By Michael Gougis

Miriam Cardenas was perplexed. It was an October day in 1995 and Cardenas, the Santa Monica water department's chief chemist, had been poring over lab reports on the purity of municipal drinking water. The reports indicated that one of the city's wells had tested positive for a chemical compound Cardenas had never heard of: MTBE.

It was pure chance that the stuff had been detected at all; no one in the water department had been looking for it. But once a year, Santa Monica ships samples from its wells to a private laboratory in Pasadena, which happened to have an oil refinery among its clients. The refinery wanted to check for MTBE, a gasoline additive, in wastewater it was discharging into local sewers. For the sake of convenience, the lab ran the same test on samples from both the refinery and Santa Monica.

"It was serendipity," said Cardenas. "It was just a routine test, but we ended up screening for something almost no one else was looking for."

After the lab found the chemical in a second water sample, the city installed equipment to directly monitor its wells. Another round of tests in February 1996 showed that MTBE levels were rising rapidly in city water. That same month, a top state health official issued a bulletin urging water suppliers to start screening for MTBE. But the bureaucrat soothingly added that contamination of public drinking water supplies was "unlikely."

years to come.

Santa Monica isn't alone in its woes. Water utilities in San Jose, Sacramento, and South Lake Tahoe also shut down drinking wells because of MTBE contamination. A recent University of California study estimated that as many as 160 public and 5,000 private wells are contaminated statewide. The cost of cleaning them up, the UC researchers said, will be $340 million to $1.5 billion more each year than if the water was fouled only with regular gasoline. The story of how MTBE was introduced in California--with little or no regard for its potential impacts on drinking water and human health--is a case study of how laxity and short-sightedness on the part of government officials, corporate executives, and environmentalists can produce a debacle for the public.

With the smelly chemical now lurking in wells and reservoirs around the state, scientists still don't know if it triggers cancer or other illnesses. Oil refiners, worried about multimillion-dollar lawsuits, are now pleading with government regulators to let them take MTBE out of gasoline. Experts continue to debate whether it actually reduces air pollution. (One study indicated MTBE increases a key ingredient of smog.) And car-happy Californians are so hooked on the stuff that it may be economically impossible to ban it anytime soon.

"This should have been foreseen," said Arturo Keller, a UC Santa Barbara professor of environmental science who led the landmark UC study. "Someone should have said, 'We need to do a full assessment.' It didn't even need to be complicated. If someone had done their homework, this never would have happened. But it never got done."

MTBE--methyl tertiary butyl ether--was first produced in Germany and Italy in the early 1970s. It became an ingredient in American gasoline in the late '70s, as oil companies sought a less harmful substitute for lead. MTBE performed well as an octane booster, eliminating engine knock in cars running on the new unleaded fuels. But until the late 1980s, its use was limited mostly to premium gas, in blends of three percent or less.

The picture changed dramatically in 1990, when Congress sought to crack down on air pollution through a series of amendments to the federal Clean Air Act. Congress considered requiring the use of cleaner-burning alternative fuels, such as ethanol. But oil refiners, worried about losing market share for fossil fuels, came up with reformulated gasolines known as "oxyfuels." They were made with oxygenates, which add oxygen to gas; one of the best known oxygenates was MTBE. The feds required that oxygenated gasoline be sold in cities with severe air pollution, including L.A. Congress left it up to refiners to pick an oxygenate; most chose MTBE, which was cheap to make and mixed well with gasoline. When President Bush signed the amended Clean Air Act into law, he proclaimed "a new era for clean air."

If the oil industry was happy, so, too, were many environmentalists. They strongly supported oxygenated gas. Besides its smog-diluting properties, MTBE would replace benzene, a gasoline component with some particularly nasty side effects on people. Short-term exposure to benzene at high levels causes unconsciousness, convulsions, and death. Over the long term, benzene damages bone marrow and chromosomes, causes menstrual disorders and reduced ovary sizes, and can lead to leukemia.

"MTBE was supposed to be a miracle cure for benzene," said Bonnie Holmes-Gen, senior lobbyist for the Sierra Club of California. Ironically, benzene had taken the place of lead in gasoline before its health hazards became known.

But amid the general euphoria over MTBE were scattered voices of dissent. One of them was Dr. Myron

Little was known about the human health effects of MTBE, although it had been shown to cause cancer and kidney failure in lab rats. What was known was that the chemical stinks, giving off an acrid, turpentine-like smell. Its odor and taste are so repellent that most people won't drink water tainted with MTBE, even in minuscule amounts. And despite the state health official's assessment, MTBE soon began turning up in drinking water supplies across California, forcing well closures and raising fears about its possible health impacts.

It was an unexpected and ironic denouement for MTBE, which only a few years earlier had been touted by government regulators and environmentalists alike as a magic bullet for air pollution. Its appeal was particularly strong in Southern California, which then had some of the dirtiest skies in the nation. MTBE injects oxygen molecules into gasoline, allowing it to burn more completely in car and truck engines and cutting tailpipe emissions. One of the additive's biggest boosters was also its biggest manufacturer, Los Angeles-based Atlantic Richfield Co., which in 1989 unleashed a major advertising campaign for its new MTBE-laden gasoline, EC-1.

Two years later, intensive lobbying by ARCO helped persuade state officials to pass regulations that created a much bigger market for MTBE. Soon it was one of the best-selling chemicals in America. Californians used nearly 1.5 billion gallons a year, the equivalent of a 55-gallon drum for every man, woman, and child in the state.

But there was a problem that virtually nobody anticipated: MTBE makes water undrinkable. It spreads even faster in water than traditional gasoline and acts as a magnet for other pollutants. And it was leaking into potable water from faulty gas-station storage tanks throughout California.

Santa Monica had one of the worst contamination messes. At first, the city tried pumping less water from tainted wells and more from untainted ones, but that didn't work since MTBE migrates so quickly. With little hard evidence and few guidelines to follow, Santa Monica found itself backed into a corner. Craig Perkins, the city's director of environmental and public works management, later testified before a congressional committee: "We were forced to arrive at our own conclusions about whether MTBE-contaminated water should be delivered to our citizens. No enforceable water-quality standards for MTBE existed in early 1996."

By the summer of 1996, the stench of MTBE was continually in the nostrils of workers at the city's main wellfield, at Sawtelle Boulevard and Westminster Avenue in Palms. The city shut down those wells, but then its secondary wellfield started to show traces of MTBE. About 200,000 people in Santa Monica rely on municipal water for drinking, cooking, bathing, and watering lawns and gardens. Now, half the water needed to supply them was unusable.

In desperation, city officials cut a deal with the Metropolitan Water District. From the giant water distributor's Lake Matthews reservoir in Riverside County, millions of gallons were pumped up through a massive concrete tower and shot west, through a treatment plant in La Verne, then west again, coursing through a pipeline more than two feet wide under Sunset Boulevard to Santa Monica's secondary wellfield at Wilshire Boulevard and Bundy Drive. There, MWD engineers cranked open a valve that sent unpolluted water gushing into the city's distribution pipes.

It was not cheap. Santa Monica was forced to jack up water rates by 25 percent, or an average $96 a year per household. Replacing the contaminated water cost the city more than $3 million from mid-1996 through mid-1997. Even today, Santa Monica depends on the MWD for 80 percent of its water, or about 10 million gallons a day--and will need imported water for

Mehlman, who had a wide range of experience as both former chief of biochemical toxicology for the U.S. Food and Drug Administration and former director of toxicology for Mobil Corp. Mobil had fired Mehlman in 1989 for telling Japanese authorities that a shipment of Mobil gas contained too much benzene. He sued the company and was awarded $7 million.

A founding editor of the Journal of Toxicology and Environmental Health, Mehlman had long been concerned about MTBE's health impacts. The year Congress passed the Clean Air Act amendments, he wrote an article for the Teratogenicity, Mutagenicity and Carcinogenicity journal saying there was no data supporting a conclusion that MTBE was safe. As a consultant to the U.S. Environmental Protection Agency, he had reviewed the handful of studies that then existed on the chemical's health and environmental impacts.

"None of those studies had any scientific validity," Mehlman said from his home in Princeton, New Jersey. "They were either hypothetical models or wishful thinking. Who wrote the Clean Air Act amendments? You'd think it was Congress. But they aren't capable of doing the science behind something like that. They rely on the [oil] industry. When I tried to point it out to the EPA, they didn't want to hear it." Responding to a query from state officials in New Jersey, where the use of oxyfuels triggered widespread asthma complaints, the EPA admitted in 1993 that it had no information on whether MTBE could cause cancer in humans.

A year after Congress approved oxygenated fuels, the California Air Resources Board, which regulates air pollution, began debating its own version of the federal rules.

One of the issues before the ARB was whether to require that oxyfuels be sold throughout California, rather than just in smoggy urban areas. The oil industry was divided on the issue. Facing massive costs to retool their plants in order to produce oxygenated gasolines, some refiners, particularly smaller ones, hated the notion of a statewide requirement.

But ARCO put on a full-court press to get the air board to order that oxyfuels be marketed across the state.

At the time, ARCO was already retailing its oxygenated gasoline--EC-1--and pitching it in newspaper and television ads. In 1989, ARCO trumpeted its new product as a smog antidote in attention-grabbing, four-page ads in the L.A. Times, Long Beach Press-Telegram, and other papers catering to pollution-weary Southern Californians.

"Let's drive away smog," exhorted the ads, which featured depressing photos of downtown L.A. barely visible through a thick veil of smog. "We're starting now with the introduction of EC-1, the first emission control gasoline. A series of EC gasolines for all vehicles is planned. Gasolines from ARCO that could lead to cleaner skies in Southern California--maybe the world. Emission Control Gasoline. The pure and simple solution."

In a Times op-ed article in 1990, ARCO Chairman Lodwrick M. Cook wrote that if all cars and trucks in L.A. without catalytic converters switched to EC-1, it would cut air pollutants by 350 tons a day. "We had a product that fit with what the regulators were looking for, and we pursued it," said ARCO spokesman Scott Loll. By 1992, ARCO was the nation's largest producer of MTBE, pumping out 3.6 billion pounds of the stuff, more than the next two largest manufacturers combined.

Despite the estimated $3 billion to $5 billion it cost refiners to reconfigure their California plants, there was a silver lining for them. One of MTBE's major components is isobutylene, a waste product left over

from oil refining. The EPA regarded isobutylene as a hazardous substance, and it had to be stored and disposed of in a careful--and costly--manner. But with the rise of oxyfuels, isobutylene went from garbage to gold. Between 1985 and 1995, production of MTBE jumped 25 percent per year in the U.S. By early 1996, it made up 11 percent of virtually every gallon of gas pumped in California.

Eager to boost demand for MTBE in the country's biggest car market--California--ARCO targeted the state Air Resources Board for intensive lobbying during the 1991 debate over oxygenated gas.

Andrew Wortman, a former Cal State Fullerton engineering professor who then sat on the ARB, recalled that ARCO people seemed to be all over the place. It was their formula that was used to show air-board members how effective oxyfuels could be. Wortman said ARCO representatives showed up at the front door of his Santa Monica home, and when he flew to Sacramento, an ARCO guy had coincidentally purchased the airline seat next to him.

ARCO's chief lobbyist at the time, Alan Lippincott, said the company decided that building up the market for EC-1 would be a priority and that ARCO "pursued it aggressively." While other air-board members said they weren't lobbied as much as Wortman, Lippincott acknowledged that Wortman's recollection "is not outside the realm of possibility."

It wasn't just ARCO that was pushing hard for oxyfuels. Ultramar, a large independent refiner, also wanted them approved. And the oil companies had influential backing from their natural antagonists: environmentalists. Among the groups loudly singing MTBE's praises were the Sierra Club, the Natural Resources Defense Council, and similar organizations.

"The other environmental groups felt that MTBE was the lesser of two evils, that whatever got benzene out [of gasoline] must be better," recalled Azibuike Akaba, environmental scientist for Communities for a Better Environment, one of the few ecological groups that questioned oxyfuels in 1991. "It's obvious that there weren't enough studies done on how it would impact the ground water. It seemed like [the Sierra Club's support] was a premature stance to take."

Tim Carmichael, executive director of the Westside-based Clean Air Coalition, another environmental group that backed MTBE, acknowledged, "We were all a little too focused on the air quality benefits back then and didn't look at the possibility of ground water contamination."

The air board ultimately ordered that oxygenated gas be sold throughout the state, in what became known as California's "cleaner-burning fuels" program. But Wortman said the program represented a triumph of private profits over sound public policy.

"We had no scientific basis for passing this. I don't believe in any briefing I got from [the ARB] staff I got the complete truth. We passed the regulations on the basis of bad science and predetermined conclusions," said Wortman. "No one wanted to hear any bad news about its toxicity; when I would ask, staff would keep saying 'it's not toxic, it's not carcinogenic.' We bought into the ARCO game. And [ARB Chairwoman Jananne] Sharpless--she was impenetrably stupid--kept on banging, saying the governor wanted this passed."

On November 22, 1991, the air board unanimously approved the specifications for cleaner-burning gas and set a Spring 1996 deadline for it to be used across California. Sharpless denied that Wilson put any pressure on the board, or that she rammed the regulation through. ("Would I had that kind of power," she said.) And Wortman concedes that in the end, he gave in and voted along with the rest of the board members.

"How I voted made no difference," he said. "It was rigged."

But overlooked in the debate were three big problems. For one, oxyfuels cost more than ordinary gasoline. Now fully addicted to MTBE, Californians pay between $280 million and $970 million more at the pump each year, according to the UC study. Moreover, oxygenated gas doesn't have as much energy, and reduces mileage by up to 3 percent. That, in turn, costs California drivers another $300 million to $400 million annually, the UC report said.

The second problem was what would happen when MTBE hit the water table--and it was truly only a matter of when. Thousands of gas-station tanks throughout California were oozing petroleum products into nearby soil and water. Federal officials were well aware of the issue; it had been identified as far back as the late 1960s. But policymakers in Sacramento didn't connect the dots between those porous tanks and the inevitable environmental consequences of pumping huge volumes of MTBE into them.

"Everyone knew MTBE would be in widespread use. And no one ever raised the issue of MTBE as a ground water contaminant," said Allan Hirsch, an ARB spokesman.

That was even more remarkable given that Gov. Pete Wilson had in 1991 established a state version of the EPA specifically to head off such bureaucratic myopia.

"When the Wilson administration established the Cal-EPA program, its primary function was to ensure that things didn't fall through the cracks," said Kip Wiley, an investigator for the state Senate Office of Research. "Air quality improvements were not supposed to affect the water. And although there are signs that some people were concerned about MTBE, those concerns never rose to the level of anyone doing anything about it."

Wortman said he found out MTBE was seeping into Santa Monica's drinking water when he opened his water bill and saw it had skyrocketed. But, he said, he wasn't surprised. "Tanks leak. Pipelines leak. We knew the problem would be there."

Several people involved in the 1991 debate point fingers at the state Water Resources Control Board, which is supposed to oversee the safety of California's drinking water. When the Air Resources Board was considering its cleaner-burning gas regulations, all state agencies were invited to comment on them, to raise any concerns they had.

But the water board "didn't respond to us," according to Jananne Sharpless, the air board's former chairwoman.

Water board spokesman Robert Miller said his agency has no record of receiving such a request. But, he added, "We get a lot of requests for input. There were a lot of proposals for new gasoline components at the time. And if it didn't look as though it was a water-related issue, we probably wouldn't have responded. Back then, no one knew it would be a water-related issue."

Last month, state Auditor Kurt Sjoberg released a report that had harsh words for both the water board and the state Department of Health Services, which is also charged with insuring the cleanliness of potable water.

"As early as 1990, Health Services officials became aware that MTBE was contaminating drinking water wells within California; however, Health Services did not establish regulations to test for MTBE in

drinking water until 1997, nor did it adopt interim emergency regulations, even though it has the authority to do so," concluded Sjoberg's report, which was sent to state legislators.

"Not only does the state regulate underground storage tanks ineffectively, it has failed in some instances to aggressively enforce the state's Safe Drinking Water Act," Sjoberg said. "The state has a flawed regulatory process for ensuring that groundwater sources provide drinking water free of gasoline contaminants. We found deficiencies at every step of the way."

The audit found that as of November, the state water board still had not issued guidelines for MTBE cleanups, leaving a host of local water agencies to come up with their own. And the state water board's own investigation found that 84 percent of the leaking underground tanks were discovered only at the time the tank was removed; in other words, the inspection program designed to spot faulty tanks wasn't working.

The third--and potentially most serious--problem overlooked by MTBE's cheerleaders was that no one knew if it would damage human health. The UC researchers looked for nearly a year and found little or no research indicating whether MTBE causes cancer, nervous system damage, or asthma. Unfortunately, it is not uncommon in the United States for a chemical to be put on the market before its health impacts are fully understood.

"Chemicals are innocent until proven guilty, and there is no incentive to test them for health impacts, because once there's a record that something might be toxic or hazardous, someone might have to do something about it," said Allan Margolin, spokesman for the Environmental Defense Fund.

In 1997, the EDF released a study, "Toxic Ignorance," which pointed out how little is known about the health consequences of many of the nation's most widely used chemicals. In response, manufacturers and federal regulators agreed to test 2,800 chemicals for health and environmental problems--but only over the next six years.

"I keep asking the question, why weren't these health studies done years ago?" said Arturo Keller, the UC Santa Barbara professor. "The frightening thing is that they still aren't being done. The way we're going, we'll probably ban [MTBE] before we find the answers."

Not long after the state air board approved oxyfuels, warning signs began popping up.

In 1992, a study by chemical giant Union Carbide showed that male lab rats exposed to MTBE-laden air died of progressive kidney failure sooner than those breathing normal air. Although the oil industry said the rats were exposed to far higher doses than people would encounter, the study triggered widespread concerns about possible health problems.

By the mid-'90s, more studies emerged showing that MTBE caused cancer in lab rats and mice. High doses increased rates of lymphatic and testicular cancer in the animals in a 1995 study; another study indicated a rise in kidney cancer in male rats. The federal government labeled MTBE as a potential human carcinogen.

In 1997, scientists began to question the central premise of MTBE--that it would scrub pollution from the skies.

A report by the National Science and Technology Council, an agency created by President Clinton to coordinate federal technology policy, said that instead of the 25 percent cut in carbon monoxide

emissions predicted by early computer models, levels of the toxin fell only 10 percent or less when oxygenated fuels were used. Researchers also said that MTBE-bearing gasoline boosted emissions of formaldehyde, a probable carcinogen.

Scientists argued over MTBE's impact on one of the key ingredients in smog: nitrogen oxides. Even the state and federal EPAs can't agree on this point. Cal-EPA officials insist MTBE increases nitrogen oxide releases, while federal EPA researchers say gasoline with up to four percent oxygenates produces no change in the pollutant.

Many researchers noted that pollutants targeted by the state's cleaner-burning gas program had been dropping steadily for the past 20 years in California. But they said it was difficult to say exactly why that is happening. The lower emissions could be related to oxygenated gas, but could also be attributed to higher-tech engines in newer cars. Even El Nino might be a factor.

Scientists are certain of one thing, however--MTBE is no longer even needed to meet the state's cleaner-burning gas requirements.

The problem with earlier studies that showed emission decreases was that they focused on motor vehicles built in the 1980s, said Keller of UC Santa Barbara. Those older cars and trucks ran cleaner on oxygenated fuels than they did on traditional gasoline. But oxyfuels had zero effect on emissions from vehicles that began coming on the market in the early 1990s--they were equipped with high-efficiency catalytic converters, fuel injection, and oxygen sensors, said Keller. Although roughly two-thirds of the cars and trucks on the road in California were built before the early '90s, their number goes down daily as owners replace them. And the more new vehicles on the road, the less impact MTBE and other oxygenates will have.

Even as scientists began to question MTBE's value in cutting air pollution, the damage it was doing to drinking water was becoming hard to ignore.

MTBE's dangers in water should have come as a surprise to no one. Unlike gas additives used in the past, it dissolves in water, doesn't attach to soil particles, and doesn't degrade on its own. It spreads rapidly and can pull other pollutants along with it, extending the contamination plume further than it would have traveled without MTBE. And all this was known long before federal and state officials adopted new vehicle emissions standards in the early '90s. A 1986 report from the American Petroleum Institute, for instance, stated that "a plume of MTBE in ground water should be more extensive than the plume of other gasoline components."

While MTBE's impact on people's health remains unknown, its effect on their noses and palates is clear. Studies indicate people can detect it in very small amounts; some tasted it in concentrations as comparatively low as a shot glass of the chemical in an Olympic-sized swimming pool of pure water. The UC study quoted people variously describing MTBE as "bitter," "solventlike," and "nauseating." And even if potential health problems were not an issue, few people will drink water that smells like turpentine.

Unfortunately, that scent has crept into wells and lakes from San Diego to Clear Lake, northwest of Sacramento.

Sacramento's Fruitridge Vista Water Co. discovered MTBE in its drinking water last January, threatening its ability to supply 15,000 customers. The South Tahoe Public Utilities District, which serves 13,000 customers, shut down two wells in September; since then, it has shut down 10 more wells,

eliminating 20 percent of its water supply. In December, the Great Oaks Water Co. in San Jose shut down two wells.

In the fall of 1995, MTBE began to ruin Craig Perkins' wells. With his neatly trimmed beard and wire-rimmed glasses, Perkins, Santa Monica's chief of environmental and public works, could easily pass for a scientist. His coffee mug sports a depiction of a caffeine molecule. Awards from the EPA, the U.S. Department of Energy, and other agencies are displayed in a glass case just outside his office door. For the past three years, however, he has had little time to reflect on past honors; he and his staff have been struggling to get MTBE out of the city's drinking water.

In October 1995, when the chemical was first detected in municipal wells, Perkins had few places to turn for information.

"We had to start doing our own research on its health impacts, how it was transported in the ground water," said Perkins. "Very little was known at the time. Yet even when it was making up 11 percent of our gasoline, there still was no [government] requirement to even test for it."

Government safety standards for MTBE have been all over the map in recent years. With only a handful of animal toxicity studies to work from, the federal EPA in 1992 set an upper limit on the chemical at 200 parts per billion in water. Later, the feds lowered that to 35 ppb. State health officials started with 35 ppb but are now considering whether to drop it to just 5 ppb--one-fortieth of the original federal standard.

In truth, government scientists were simply setting the limits as low as possible in the absence of meaningful safety studies.

Steve Book, a toxicologist for the state Department of Health Services, said state researchers ran what little data they had through a risk-assessment process and came up with a number they felt would pose no threat to people--then divided it by 10,000. The result was 35 ppb.

"When you have a limited amount of information, when your confidence in that information is limited, you are extremely conservative with your estimates," Book said. "As more information would become apparent for a particular chemical, you might reduce that factor to 1,000, or 300. It all depends on the quality of the information available."

It was not until February 1996 that the Department of Health Services issued a letter to Santa Monica and other water suppliers saying MTBE was showing up in wells. The department reiterated the state limit of 35 ppb for water shipped to local homes and businesses.

By then MTBE levels in Santa Monica's main wellfield, known as Charnock, were shooting far above the state's ultra-conservative safety limit.

In three weeks in February and March, MTBE levels soared from 45 to 610 ppb at one of the wells. The sharp smell of turpentine filled the pumping station. The surprising thing, Perkins said, was the speed with which MTBE levels went from undetectable to many times greater than the state limit. At one well, measured levels jumped from 15 to 80 ppb in three days.

Most of the contamination, Santa Monica officials believe, came from leaks at nearby gas stations. When city officials looked up records at the Regional Water Quality Control Board in Monterey Park, they found more than 20 leaks from gas stations near the Charnock wells in the 10 years prior. Similarly,

when MTBE started showing up at the city's secondary Arcadia Wellfield, an investigation showed that an adjacent Mobil gas station had a history of leaks dating back to 1987. Significantly, the regional water board was not monitoring the site for MTBE contamination in the mid-'90s.

At first, the city tried to dilute the amount of MTBE flowing into residents' homes and businesses by pumping more from clean wells and less from tainted ones. That strategy failed. The dirtiest water shipped to customers had 72 ppb of MTBE, more than twice the state limit. By June, all five Charnock wells were shut down. MTBE levels were rising at two Arcadia wells, and, by the end of 1996, those wells were closed, too.

But the problem had cropped up in a city jam-packed with environmentalists--home of Heal the Bay and the world's first solar-powered Ferris wheel--and city officials quickly set out to find who had pissed in their pool and to make them clean it up.

They hired lawyers and consultants and began looking high and low for information on MTBE. In February 1997, they sent a delegation to Washington, D.C., to meet with U.S. Sens. Dianne Feinstein and Barbara Boxer, as well as officials from the EPA and other agencies. But the Santa Monica contingent did most of the talking and educating.

"This was not even on their radar screens at this point," recalled Perkins. "Their consensus was, 'It's really too bad, but Santa Monica must be an anomaly.' "

State and regional water officials did not seem to take the issue very seriously at first. In 1996, regional water-board investigators were being pushed by their bosses in Sacramento to close hundreds of investigations into leaking underground tanks, even in cases where they hadn't looked for MTBE. The regional water board's director at the time, Robert Ghirelli, called it a calculated risk.

The policy was soon overturned as MTBE began showing up, first in shallow bodies of water and then in deeper ones.

By April 1998, investigators had documented 766 sites in L.A. County where MTBE was in ground water or soil. Although a typical gas-station-MTBE leak will take three years and $390,000 to clean, it would cost only $280,000 if MTBE wasn't present, according to the UC study. (UC Davis researchers are now trying to determine whether bacteria can be used to break down MTBE, which would be a cheaper way to eliminate the chemical from the environment.)

State and federal law required that gas-station tanks be replaced or upgraded by last month. But in California an estimated 30,000 tanks, about 40 percent of the total, still need to be fixed. Indeed, so many station owners failed to meet the deadline that the federal EPA announced it would concentrate its enforcement efforts on stations run by major oil companies and give mom-and-pop operators another six months before cracking down.

But even replacing all of the older tanks in California with double-walled, lined containers won't cure the problem.

The Mobil station that Santa Monica officials blame for polluting the Arcadia wells had an upgraded tank, but leaks developed in pipes through which gas was pumped from delivery trucks, Perkins said. And the UC researchers estimated that at least 100 to 150 leaks open up each year in larger transport pipelines that move gas from refineries.

Today, the backlash against MTBE is fully underway in Sacramento and Washington.

State Sen. Richard Mountjoy of Arcadia, a conservative Republican perhaps best known for co-authoring Proposition 187--the ballot measure denying benefits to illegal immigrants--jumped into the fray early. In the spring of 1996, Mountjoy was at home showing his grandson how to use gasoline to clean dirty engine parts--not the safest idea, but a practice used by motorheads for decades--when the rubber gloves he was wearing disintegrated.

Later that evening, Mountjoy said, red blotches broke out on his face. The legislator has no evidence directly linking MTBE to the incident. But his tale of melting gloves isn't as far-fetched as it may sound. Chevron warns consumers that its cleaner-burning gas with MTBE can harden rubber fuel-system parts--seals, hoses, o-rings--in a small number of older cars, making them more likely to crack and leak. In any event, the incident got Mountjoy interested in the issue. And what he found disturbed him enough to seek a ban on MTBE in California.

"You would never go back to lead, but it would be better than using MTBE," he insisted.

Mountjoy is not exactly known as an environmentalist. The California League of Conservation Voters gave him a score of zero on its 1998 environmental scorecard. Yet the legislator, a former construction contractor, finds himself on the same side of the MTBE issue as longtime Westside Sen. Tom Hayden, who got a 95 from the league. Mountjoy's efforts to ban MTBE put him in demand on radio talk shows, and his bill to ban MTBE drew an immediate counteroffensive from the oil industry, and even the head of the California EPA. Although his bill was amended in 1997 to eliminate the ban, he still succeeded in launching the UC study that called for phasing out MTBE.

In recent months even the oil companies have started begging for a reprieve from the stuff.

Tosco Corp., which operates Union 76 gas stations, became the first last October. Duane Bordvick, the refiner's vice-president of environmental affairs, sought government permission to reduce the amount of MTBE in its fuels, citing "growing evidence of the potential for extensive MTBE contamination that could occur and the resulting liability the state, and ultimately our citizens, could face to restore California drinking water supplies."

"It is now apparent that the issue of potential MTBE contamination of the state's water was not adequately considered" before cleaner-burning gasolines were introduced, Bordvick wrote.

Chevron followed suit a month later. The company doesn't want to sell oxygenated gas any more, and now doesn't do so in rural counties and the San Francisco Bay Area, where air pollution is not severe. But in cities where it is, like L.A. and Sacramento, federal rules still require Chevron to offer oxygenated gas. The rules apply even though unoxgenated gas would now meet government clean-air standards, given recent improvements in motor-vehicle engines.

"In terms of smog, there was little reduction of air pollution attributable to oxygenates," said Rod Spackman, Chevron's manager of government and public affairs. "Where we can, we are using gasoline with no oxygenates."

(ARCO, incidentally, no longer is a major player in MTBE production. The company finished selling off its chemical unit last year, leaving the new owner, in the words of one environmentalist, "holding the flaming bag of shit." Much of the nation's MTBE now comes from companies that make petrochemicals. They oppose taking MTBE out of gasoline and thus find themselves at odds with refiners. "The oil

industry hates us," moaned Eric Bolton, spokesman for the Oxygenated Fuels Association, a trade group.)

As they beat a hasty retreat from their previous promises about the benefits of MTBE, the oil companies face the unnerving possibility of having to pay to clean up MTBE-tainted water supplies--a monumental task that could carry a staggering price tag.

Communities for a Better Environment sued ARCO and a number of other major refiners last year for allegedly violating state business laws by selling MTBE-laden gasoline. In the lawsuit, CBE cites study after study showing that the oil industry knew decades ago that leaking storage tanks were a major problem. The suit demands that refiners be forced to use their MTBE profits to identify and cleanse contaminated water.

After some initial bickering with Santa Monica officials, Mobil, Shell, and Chevron agreed to pay to sanitize the city's drinking water and reimburse it for the costs of replacement water, attorneys, and consultants. To date, the companies have paid the city more than $12 million, according to Craig Perkins.

Refiners' liability problems could worsen dramatically if it turns out MTBE damages human health. And the jury is still out on that issue.

Last month, two scientific advisory committees convened by the state Office of Environmental Health Hazards concluded there isn't enough evidence to warrant placing MTBE on the state's Proposition 65 list of chemicals suspected of causing cancer or birth defects. But the decision was by no means the end of the debate, said John Froines, a UCLA professor of environmental health sciences and a member of the cancer committee.

Froines said that although scientists studying the risk of birth defects voted unanimously against placing MTBE on the Prop. 65 list, those examining cancer risks deadlocked 3-3, with one member absent. "The issue is far from resolved. A lot of science remains to be done," said Froines, who voted in favor of placing MTBE on the list. (The California EPA put the best possible spin on the split vote, saying in a press release that the cancer committee "found insufficient support for the proposition that MTBE is a carcinogen.")

The ongoing debate doesn't surprise Myron Mehlman, the former toxicology chief for the U.S. Food and Drug Administration. "No one is doing the studies that need to be done," he said. Last year, in fact, the International Agency for Research on Cancer, the state Senate Office of Research, and University of California researchers independently reached the same conclusion: There were no studies that could identify with any degree of certainty the health effects of MTBE on people.

Even if firm evidence of health complications existed, it might not be enough to flush MTBE out of the nation's gasoline supply right away.

Some experts say the substance is now so widely used that abruptly getting rid of it would create major shocks to the economy. At a hearing last year, U.S. Department of Energy officials cautioned against a proposal by Sen. Feinstein and San Diego area Rep. Brian Bilbray to end the federal oxyfuels mandate. DOE officials said eliminating MTBE could shrink the nation's gas supply, increase dependence on foreign oil, and inflict unfair financial hardships on refiners that spent huge sums converting their plants in order to comply with government rules just a few years ago.

A sudden ban could send California's economy into cardiac arrhythmia by generating steep rises in gas prices, according to a report last fall by the state Energy Commission. "If the use of MTBE were discontinued immediately, the consequences would be dire for consumers and catastrophic for California's economy," the commission said.

Nonetheless, lawmakers in both Sacramento and Washington are expected to renew their efforts to ban MTBE this year. Although most of California's congressional delegation has signed on to the Feinstein/Bilbray bill, Rep. Henry Waxman of Los Angeles, significantly, has not. Despite the MTBE fiasco in Santa Monica, which is part of his district, Waxman, a liberal Democrat who was a leading architect of the 1990 Clean Air Act amendments, cites the Department of Energy's assertion that eliminating the federal mandate would not immediately lower MTBE use, since some refiners might choose to keep blending it into gasoline.

Environmentalists also are divided over what to do about MTBE now. Citizens for a Better Environment, which opposed MTBE in 1991, wants it immediately banned. But other ecologists, though chagrined at the fiasco wrought by their support for oxyfuels, aren't so sure a ban is the answer.

The Clean Air Coalition hasn't adopted an official position, although its executive director, Tim Carmichael, favors a gradual phaseout. Though the Sierra Club is no friend of MTBE, its position on the chemical is "complex and evolving," said lobbyist Bonnie Holmes-Gen. The biggest question, she says, is what might replace MTBE in gasoline--and how dangerous to human health and the environment that substance would be.

"If we just ban it without knowing what will be used next," said Holmes-Gen, "we run the risk of making the same mistake we did with MTBE."

Meanwhile, the taps in Santa Monica still run with water imported from faraway Lake Matthews--ten million gallons a day of it. Perkins, the city's chief of environmental and public works, said he's confident that no one who drank the tainted water in 1995 and 1996 will get sick. "Since the MTBE exposure to our water customers was very short term we have no reason to believe that it resulted in any negative health impacts," he said.

If and when Santa Monica can use its own wells again is a matter of speculation. The city still hasn't been able to determine exactly how much of its water is contaminated; mapping the movement of chemicals in underground aquifers is a complex and imprecise science. Santa Monica doesn't expect to be able to use its wells for years; a more precise time line would be mere guesswork.

"It is practically impossible to do this sort of calculation," said Perkins. "I think it is best to focus on the fact that none of the water is currently usable because of the contamination.