



Senate Approves 8 Billion Gallon Ethanol Mandate
-- Feinstein expresses concern about impact to California --

June 15, 2005

Washington, DC – *The U.S. Senate today approved an amendment to the Energy Bill that would mandate the use of 8 billion gallons of ethanol in the U.S. by 2012.*

Although the amendment exempted California from a summertime ethanol requirement and repealed the 2% oxygenate mandate, U.S. Senator Dianne Feinstein (D-Calif.) opposed this amendment because of the \$2 billion cost to the Federal government and the likely increased cost of gasoline in California.

Following is the prepared text of a statement by Senator Feinstein entered into the Congressional Record prior to the Senate's vote:

"Mr. President, I rise today to oppose Senator Domenici's amendment to require that U.S. refiners blend 8 billion gallons of ethanol into gasoline each year by 2012.

I think this is a mistake that will cost the Federal Treasury \$2 billion by the time it is fully implemented and could further pollute California's air.

In my home State, the mandate will mean that refiners must choose between blending ethanol into gasoline or using a costly credit/trading system.

Either choice will mean California consumers pay more at the pump.

According to the California Air Resources Board, California would be able to mitigate the air quality impacts of a mandate if it were limited to 6 billion gallons or less.

With a 6 billion gallon mandate, refiners in California would be required to use about 660 million gallons of ethanol, which they could accomplish in the cooler winter months alone.

However, at 8 billion gallons, the State's refiners would be forced to use about 880 million gallons of ethanol and they would either have to use ethanol in the hot summer months, when it could pollute the air, or buy costly "credits" for not using ethanol.

While we do not know exactly how the credit-trading system will work, it is estimated that the credits would cost about 40 cents per gallon ethanol.

So if California refiners were not able to use about 220 million gallons of ethanol per year, it could cost \$88 million annually to buy the credits – money that would inevitably be passed on to drivers.

Now, I do want to thank Chairman Domenici for including two provisions in the amendment that could help my State:

- repealing the 2% oxygenate standard; and
- maintaining the summertime waiver for California.

The federal 2% oxygenate standard has forced areas with poor air quality, including the entire State of California, to use either MTBE or ethanol in gasoline.

This federal requirement has forced California's refiners to use an oxygenate even though they can make cleaner-burning gasoline without MTBE or ethanol.

To meet this oxygenate requirement, California has been forced to use ethanol since 2004 when the State officially banned MTBE, although many refiners in the State started using ethanol as early as 2003.

Beginning in the Summer of 2003, ethanol was found to have had a detrimental impact on the State's air quality. And on August 1, 2003 the California Environmental Protection Agency informed me that:

‘...our current best estimate is that the increase in the use of ethanol-blended gasoline has likely resulted in about a one percent increase in emissions of volatile organic gases (VOC) in the SCAQMD [South Coast Air Quality Management District] in the summer of 2003. Given the very poor air quality in the region and the great difficulty of reaching the current federal ozone standard by the required attainment date of 2010, an increase of this magnitude is of great concern.

Clearly, these emission increases have resulted in higher ozone levels this year than what would have otherwise occurred, and are responsible for at least some of the rise in ozone levels that have been observed.’

I would like to insert a copy of this letter for the record.

In September 2004, the California Air Resources Board sponsored a study by the Coordinating Research Council entitled ‘*Fuel Permeation From Automotive Systems.*’

The purpose of the study was to find out if three different fuels had different chemical properties that made one evaporate more rapidly than the others.

The fuels that were studied were MTBE-blended gasoline, ethanol-blended gasoline, and gasoline with no oxygenate.

The study found that emissions increased from all 10 of the gas tanks and engines that were studied when ethanol replaced the MTBE in gasoline.

In fact, the ethanol blended gasoline caused emissions to increase by 65% when compared with MTBE blended gasoline, and by 45% when compared with non-oxygenated gasoline.

Here's why: ethanol-blended gasoline evaporates from the car's parts faster and does so in a vapor form. Those vapors cause smog.

Ethanol's evaporative tendencies only get worse in hot climates. The Air Resources Board has since found that the use of ethanol on hot summer days increases emissions of ozone forming compounds by about 75 tons per day above what they would be if we were allowed to use summertime gasoline without ethanol.

This is important because ozone can cause respiratory difficulties in the elderly and those with asthma.

There is a strong direct relationship between temperature and ethanol—the hotter the day, the higher the emissions. On a 100 degree day, emissions are four times higher than on a 68 degree day. Therefore, the worst time to use ethanol is in the summer months.

Overall, the Air Resources Board believes that ozone levels in California are about 1 to 2 percent higher than they should be because of the oxygenate requirement.

This is a significant problem. Almost all of California's 37 million residents already breathe unhealthy air. Current levels of ozone pollution annually result in an estimated:

- 630 premature deaths
- 4,200 hospitalizations for respiratory diseases
- 3.7 million school absences

The Energy Committee approved my amendment to this bill to provide California with a waiver so that the State does not have to use ethanol in the summertime when ethanol-blended gasoline impacts air quality the most.

I do appreciate the fact that Chairman Domenici has retained this waiver in his amendment. However, I still believe the ethanol mandate is bad public policy, which:

- Increases the cost of gasoline for consumers;
- Does next to nothing to reduce oil consumption to increase energy security; and
- Has severe impacts on the federal budget.

Last month, the Director of the Petroleum Division at the Energy Information Administration stated before the House Government Reform Committee that:

‘...refiners lost production capability when replacing MTBE with ethanol. This, along with continued demand growth, has contributed to price pressures. From 2000 through 2002, California retail gasoline prices averaged about 19 cents per gallon more than the U.S. average gasoline price, but in 2003 as MTBE began to be removed, California prices averaged 27 cents per gallon higher than the U.S. average, and remained at that level through 2004.’

So far this year, California’s gasoline prices are at least 23 cents higher than the U.S. average.

Much of this additional cost can be attributed to the cost of transporting ethanol.

Because ethanol cannot be transported through the existing pipeline infrastructure and has to be trucked from the Midwest to the coasts, it adds another 10 cents to the retail cost of gasoline.

In other words, adding ethanol to our gasoline has increased the cost at the pump.

Moreover, the ethanol mandate does not improve energy security.

The ethanol mandate will only reduce U.S. oil consumption by one-half of one percent when the 8 billion gallon mandate is fully implemented in 2012.

In addition, since ethanol has a somewhat lower energy content, more fuel is required to travel the same distance.

This energy loss leads to an approximate 3% decrease in miles per gallon vehicle fuel economy with ethanol-blended gasoline.

And finally, I would like to point out how expensive this mandate is.

Ethanol receives a tax credit of 51 cents per gallon.

If the mandate were to increase to 8 billion gallons by 2012 from the 3.85 billion gallons of ethanol sold today, that would mean a net loss of an additional \$2 billion to the U.S. Treasury.

We should not be imposing a larger mandate for ethanol at a time when the ethanol industry already receives such a huge subsidy, and when the nation has such huge budget deficits.

We need to either eliminate the mandate or end the subsidy. We can keep one or the other, but not both.

Yes, the provision to allow California not to use ethanol in the summertime is a win for California's air quality. But the mandate, itself, could well be a loss for consumers and the Federal Treasury.

I hope my colleagues will join me in opposing this amendment.”

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