

Testimony In Support Of:  
LD 824 – “An Act Regarding Ethanol Motor Fuel”  
Joint Standing Committee on Environment and Natural Resources  
March 26, 2015

Good afternoon Senator Saviello, Representative Welsh and distinguished members of the Joint Standing Committee on Environment and Natural Resources. I am Ralph F. Stevens, and I stand before you today in support of LD 824.

This testimony deals primarily with acetaldehyde from the ethanol presently being used in our gasoline. The 10% ethanol added to our gasoline is in reality, 9% ethanol and 1% methanol. Methanol is added to make the ethanol poisonous and undrinkable. The exhaust by-product of ethanol is acetaldehyde and formaldehyde from the methanol. Both of these by-products are increased with the use of ethanol. One study was done by the State of Utah of the effects of oxygenated gasoline on particulate concentrations in Salt Lake and Utah counties during the winter season, 1994-1995. This study used both MTBE and Ethanol as oxygenates. We know from dealing with MTBE in the past, that it is a major contributor of formaldehyde. Since we are dealing with acetaldehyde, those are the percent increases that will be given. Measurements were taken when the minimum and maximum amounts were expected. The increases shown are 758% and 796% respectively. Representative Beth O'Connor gave past testimony on LD839 during the 125<sup>th</sup> and 126<sup>th</sup> legislative sessions that showed, that E-85, produced acetaldehyde increases of 1400% to 3600%. The Clean Air Act Amendment of 1990 (CAAA) list 180 “hazardous air pollutants”, of which acetaldehyde, formaldehyde and benzene are included.

To be on this list, a pollutant must be “...a threat to adverse human health effects (including, but not limited to, substances which are known to be, or may reasonably be anticipated to be, carcinogenic, mutagenic, teratogenic, neurotoxic, which cause reproductive dysfunction which or which are acutely or chronically toxic)...”. Benzene, formaldehyde, and acetaldehyde are all carcinogenic, and acetaldehyde is also a potent neurotoxin. Ethanol metabolizes in the body, as soon as it enters the mouth, into acetaldehyde, thus affecting every organ in the body. Acetaldehyde also enters the body thru inhalation causing the same effect as alcohol. Alcohol consumption is a choice, inhalation of acetaldehyde is not a choice if one chooses to live!

Increased acetaldehyde is in the air in increased amounts 24/7 making any health effects chronic over time. I found no health effect studies for infants or children. To subject them to such a study would be unethical. If it is unethical to do such a study or studies on a much smaller scale, what makes it so ethical to do so on a much larger scale? What right does anyone have to put increased amounts of a Group I human carcinogen, now equal to benzene, and a potent neurotoxin, into our air?

A private company cannot violate the CAAA of 1990 without suffering stiff penalties and yet the federal government can? No one has the right to subject its citizens to such a large scale of testing with a human carcinogen and potent neurotoxin. Our Constitution has a 10<sup>th</sup> Amendment which states, "*The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.*" There is nothing in our U.S. Constitution that allows for the Federal Government to put increased amounts of a human carcinogen and a potent neurotoxin into our air. The government of the State of Maine has an obligation to Cease and Desist the use of ethanol in our gasoline.

If Maine were to be the only state to discontinue ethanol, the predictions are that we will be required to use a boutique gasoline with higher prices. Not too many years ago, we heard the same prediction about discontinuing MTBE. The predictions were wrong. Gasoline prices did not rise to the 8 to 9 cents predicted, nor were supplies short. We used a 'southern gas' in the summer and regular baseline gas in the winter. I was informed that the 'southern gas' exceeded expectations for cleaner air in the summer. The predictions by the naysayers were wrong then and they are wrong today. I urge you to not make the same mistake again.

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