Introduction

Good morning Mr. Chair and Members of the Committee. Thank you for asking me to testify today about the future role of ethanol in the nation's reformulated gasoline (RFG) program. Today's record high gasoline prices and record low commodity prices underscore the need for expanded production and use of ethanol. As a domestically-produced renewable fuel made from agricultural products and biomass, ethanol can play a pivotal role in stimulating the economy of rural America by providing value-added processing options for grain. Domestic ethanol production also helps to reduce our dependence on imported oil, and lowers our vulnerability to future gas price hikes. Just as importantly, ethanol is a solution to many of the environmental concerns currently facing our nation.

I am Chair of the Governors' Ethanol Coalition, a group of 24 governors who support the increased production and use of ethanol thereby decreasing the nation's reliance on imported energy and creating a cleaner environment. The Coalition supports the production of ethanol from corn and other domestic, renewable resources using sustainable agricultural methods. And we encourage ethanol's use in all environmentally acceptable applications.

Let me begin by stating that as Governor of Iowa, the number one corn-producing state in the nation, I am a strong believer in ethanol. I have seen firsthand the positive impact ethanol has on local communities and the environment. In Iowa, we have worked diligently to develop ethanol production capacity because ethanol production provides new markets for agricultural products and adds value to these products through processing. The impact on our economy has been tremendous. Ethanol production accounts for more than $730 million added to the value of Iowa's corn crop. More than 13,000 Iowa jobs are affected by ethanol, including 2,500 directly related to production. In fact, according to a 1997
report by Michael Evans from Northwestern University's Kellogg School of Management, the nationwide domestic ethanol industry:

1. Boosts total employment by 195,200 jobs;
2. Increases net farm income by more than $4.5 billion;
3. Adds more than $450 million to state and local tax receipts;
4. Improves the balance of trade by more than $2 billion; and
5. Results in net federal budget savings of more than $3.5 billion.

Expanding ethanol opportunities is one part of a larger, long-term answer to expanding the farm economy. Farmer-owned cooperatives today produce nearly one-third of all ethanol production and are the largest growing segment of the industry. With today's low commodity prices, there is little profit in production, but there is profit and opportunity in processing.

In Iowa we also have a strong commitment to protecting and enhancing our natural resources. Balancing the needs of an agricultural economy with environmental sustainability is a continuous responsibility. But ethanol serves as a bridge toward that goal.

MTBE Water Contamination

I am here today to say that ethanol's benefits to the economy and environment are clear, and we must continue to advocate ethanol's role as a clean burning fuel in the reformulated gasoline (RFG) program. The RFG program with the oxygen requirement has resulted in air quality gains beyond the emission reduction goals in the Clean Air Act Amendments of 1990. According to the EPA, the emissions reduced from the use of RFG are equivalent to taking 16 million cars off the road each year.

There are two oxygenates widely used today, petroleum-derived MTBE and renewable ethanol.

Unfortunately, the decision by a large number of refiners to use MTBE to satisfy the oxygenate requirement of the Clean Air Act has resulted in widespread water contamination across the country, most notably in California. Even in Iowa, where we are not required to use RFG and where MTBE is not currently used or sold, the Iowa Department of Natural Resources recently found that 29% of tested
groundwater samples exceed the U.S. Environmental Protection Agency (EPA) health advisory level of 20 parts per billion. We were also surprised by the frequency of MTBE detection in the soil.

As states such as California move to phase out and eventually eliminate MTBE, we took the precautionary step of banning MTBE use in gasoline in Iowa last year. We must protect our citizens' drinking water supplies.

There is no excuse for sacrificing water quality for air quality. But, Mr. Chair, the problem is MTBE in water, not oxygen in gasoline. I believe that the optimal solution to the MTBE problem is replacing its use with ethanol. As states look for alternatives to MTBE to maintain the air quality gains of the Clean Air Act, ethanol provides a solution. In fact, with the expanded use of ethanol in the program, we can ensure both clean air and clean water, while providing an economic boost to rural America and reducing our foreign energy dependence.

Alternatives to MTBE

Oxygenates such as ethanol are added to gasoline to reduce emissions of carbon monoxide, volatile organic compounds, particulate matter, air toxics and nitrous oxides, and to displace toxics and aromatics. The end result is a reduction in harmful exhaust emissions and improved air quality.

There are concerns that if oxygenates are removed from gasoline they will be replaced by other harmful petroleum-derived products such as aromatics and alkylates. I am troubled by the possibility that we could end up putting more aromatics in gasoline, resulting in higher toxic emissions and pollution, when we have a clean-burning, renewable alternative that could guarantee the air quality benefits of the RFG program are maintained.

In January, the California Environmental Policy Council gave ethanol a "clean bill of health." The Council unanimously approved reports finding that the use of ethanol as a replacement to MTBE in the state's Cleaner Burning Gasoline (CBG) program would not have a negative impact on air quality, water quality, or public health. This action clears the way for ethanol to meet California's oxygenate demand.
In December, the Governors' Ethanol Coalition released a report confirming that ethanol is a safe, naturally-occurring substance that rapidly biodegrades and poses no threat to surface water or ground water. These findings are included in the report "The Fate and Transport of Ethanol-Blended Gasoline in the Environment." This report was submitted to state officials in California who are struggling with the effects of MTBE. In California alone, more than 10,000 wells have been contaminated by MTBE.

The use of ethanol-blended RFG in the Chicago metropolitan area has achieved the clean air goals of the RFG program without negatively impacting precious water resources. Ethanol is an attractive option for states looking for alternatives to MTBE. Ethanol provides substantial air quality and economic benefits while meeting the goals of the RFG program.

In light of high gasoline prices, it is interesting to point out that the California Energy Commission determined that with a phase out of MTBE use, ethanol-blended fuel represents the least cost option and is less costly than the use of fuels containing no oxygenates.

Last fall, Governor Graves, then Chair of the Governors' Ethanol Coalition, and I signed a letter to Senator Daschle commenting on his proposed legislation to address the MTBE water contamination problem. In that letter, we endorsed the linkage of complementing the minimum oxygen standard with a national renewable fuels standard, as a means of providing selective flexibility to certain areas like California that have been particularly impacted by MTBE water contamination. Last fall, we urged Senator Daschle to modify his draft, so that the legislation would not impose a blanket repeal of the oxygen standard. We are pleased that Senator Daschle agreed with our suggestion, and that his most recent draft is consistent with that position.

Just last month, I issued a press release applauding the announcement of the Administration's principles addressing the MTBE problem. While I am encouraged by the EPA's decision to phase out MTBE, I also believe that it is imperative that a statutory requirement also be put in place that a percentage of all motor fuels be made from environmentally friendly ethanol. I believe that the renewable fuels standard meets this test, and would provide the
ethanol industry, and our hard-pressed farmers, with a sustainable growth environment for years to come.

Ethanol Supply/Logistics

I understand that questions have been raised about the ethanol industry's ability to supply the market in the absence of MTBE. I can assure you that the ethanol industry can meet the increased demand for ethanol resulting from a phase out of MTBE. First of all, there is enough excess supply and underutilized capacity today to meet California's oxygenate demand.

Just a few weeks ago, the Governors' Ethanol Coalition released a report of current and future ethanol production, confirming the ethanol industry's ability to meet the nation's oxygen additive needs if MTBE is removed from gasoline. The report, "Ability of the U.S. Ethanol Industry to Replace MTBE," concludes the U.S. ethanol industry has the ability to double ethanol capacity within two years and could produce 3.5 billion gallons a year by 2004, resulting in an excess supply of 313 million gallons more than will be needed to replace MTBE and meet all other current markets for ethanol.

Ability of the Ethanol Industry to Replace MTBE
(Million Gallons per Year)
<table>
<thead>
<tr>
<th>Year</th>
<th>Ethanol Demand</th>
<th>Current Production</th>
<th>Increased Use</th>
<th>Expanded Plants</th>
<th>Cap. y Under Construction</th>
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The nation's 58 ethanol plants located in 19 states are well-prepared to meet the nation's immediate needs for an oxygen replacement to MTBE in gasoline.

The increased capacity for ethanol production will result from improved production efficiency leading to increased utilization of existing plants; expansion of existing facilities; new construction underway; and proposed facilities currently in various stages of development.

According to the report, six new plants in five states will begin production shortly. Twenty more grain-to-ethanol plants in 16 states, including Montana, New Jersey, Oregon, Texas and Washington, are being planned. An additional 12 plants using various organic wastes such as sweet potatoes, rice straw, wood and forest waste, and municipal solid waste in seven states, including Pennsylvania, California, North Carolina and New York, are also in the planning stages.

The study demonstrates the significant, positive impact the ethanol industry can have throughout the nation. When ethanol production reaches 3.5 billion gallons annually, 47,800 new jobs will have been created, many in areas where job creation is difficult. The non-ethanol production industries that will benefit include 2,300 new jobs in transportation, 1,300 new jobs in construction, 3,200 new jobs in the retail sector and 11,000 new jobs in service industries. These jobs will be scattered across the country. The study projects the industry's expansion will add $11.7 billion to real GDP by 2004 and increase household income by $2.5 billion.
Finally, the study concluded that there is no evidence of any material or construction constraints that would hinder the industry's ability to meet demand. As for concerns about adequate access to transportation of ethanol, a recent letter from U.S. Secretary of Agriculture Dan Glickman to Senator Harkin demonstrates that a number of transportation options are available for ethanol transport over the long term. The study, prepared by the Office of Energy Policy and New Uses in the Office of the Chief Economist, concludes there are no significant problems for ethanol transport if MTBE were to be phased out over a four-year period.

The evidence is clear that the ethanol industry does have the ability to meet the demand for oxygenated fuel as required by the Clean Air Act in place of MTBE and there is adequate access for transport of ethanol.

Conclusion

Given these factors, and in light of the vast economic and environmental repercussions associated with this issue, I support and recommend the following principles to be considered by this committee and the nation as a whole:

1. A nationwide phase out of the use of MTBE as a fuel additive within the next three years.

2. A requirement that fuel dispensing systems will be clearly labeled if MTBE is sold through those dispensers.

3. Support for research and remediation of groundwater contamination from MTBE.

4. The continuation of the 2% oxygen standard established in the 1990 Clean Air Act Amendments or a statutory requirement that ensures an equal or greater role for ethanol in gasoline.

5. Prevention of any reversal of emissions reductions gained thus far through the RFG program.

6. Establishment of regulations providing at least a .5 pound credit for reduction in carbon monoxide emissions realized from a 10% blend of ethanol in the Phase II RFG.
7. Encouragement for the production and use of renewable fuels as an oxygenate, an octane enhancer and as a replacement fuel for gasoline.

Mr. Chair, we have an opportunity today to lower our consumers' gasoline prices, reduce our dependence on imported energy, preserve water resources, provide a much-needed stimulus to rural America and maintain our air quality gains. We can achieve these goals by replacing MTBE with domestic, renewable ethanol. In order to attain these goals we must ensure a continued role for ethanol in the RFG program.

Maintaining a significant role for ethanol as MTBE use is phased out will ensure increased air quality and stimulate tremendous new economic development across the country, aiding our farmers who are in desperate need of new markets for their products. It will also encourage the development of ethanol production from biomass, enabling the production of ethanol from coast to coast, and making ethanol a truly national fuel.

Thank you,
Thomas J. Vilsack, Chair
Governor of Iowa