Statement of the Associated Petroleum Industries of Pennsylvania

Before the

Senate Environmental Resources and Energy Committee

Regarding

Impact of Gasoline Additives on Fuel Supplies & the Environment

April 5, 2006

Good Morning, Chairman White, Chairman Musto, and members of the Senate Environmental Resources and Energy Committee. I am Rolf Hanson, Executive Director of Associated Petroleum Industries of Pennsylvania (APIP). APIP is a division of the American Petroleum Institute (API), a national trade association representing more than 400 companies involved in all aspects of the oil and natural gas industry, including exploration and production, refining, marketing and transportation, as well as the service companies that support our industry. As a trade association, representing all members, API does not collect information about company-specific plans.

We welcome this opportunity to provide our views on the fuels transitions and related issues involving the fuel needs of U.S. consumers.

The Energy Policy Act of 2005 eliminates the reformulated gasoline (RFG) oxygen requirement in May 2006, and also sets a new renewable fuel standard, requiring that the industry use 4 billion gallons of renewable fuel in 2006 – increasing to 7.5 billion gallons in 2012. Eliminating the RFG oxygen requirement is a change in the law that the industry has long supported as one that will add to refiners' flexibility to produce gasoline. However, this is a major fuel change and presents significant challenges to fuel providers.

MTBE has been used in gasoline for over 20 years. It was used initially, at relative low levels, for octane enhancement in place of lead. Greater quantities of MTBE were used in gasoline as a result of the clean Air Act of 1990. The Act required the use of reformulated gasoline (RFG) in certain areas of the country with severe or extreme air quality problems. The five-county Philadelphia area is one such region. RFG is one of three distinct gasoline blends required in Pennsylvania under state and federal rules (RFG, Conventional, 7.8 RVP).

Under the Clean Air Act, RFG meets more stringent requirements for VOC, NOx and toxics emissions than conventional gasoline. The Act also required that RFG contain 2 percent oxygen by weight; again, this oxygen requirement was repealed by the Energy Policy Act of 2005.

Generally, there were two main choices for meeting the RFG oxygen mandate, petroleum-based MTBE or corn-based ethanol. MTBE became the most commonly used oxygenate in areas near the coast because of cost, transportation, availability, and handling considerations; ethanol became the oxygenate of choice in the Midwest due to favorable economics and proximity to ethanol supply.

Like MTBE, ethanol can be used for octane enhancement and as an oxygenate. However, ethanol requires special handling in transporting the substance to consumers. Ethanol is highly water-soluble. Because water and water vapor are present in storage tanks and petroleum pipelines, ethanol must be transported separately from gasoline via rail, truck or barge.

Over 99% of the ethanol produced in the U.S. is derived from corn and approximately 95% of the ethanol is produced in 5 Midwest states (MN, IA, NE, IL, IN). In 2005, the U.S. produced 3.9 billion gallons which accounts for 14.4% of the total U.S. corn crop. The United States grows more corn than any other crop. It would require roughly half of the entire corn crop grown in the U.S. to provide enough ethanol to replace just 10 percent of the gasoline across the nation.

Ethanol must be blended with gasoline at product distribution terminals. To do so, changes at distribution terminals must be made to accept ethanol shipments by rail, truck or barge. In addition, tanks at distribution terminals must be segregated and new tanks must be constructed to store ethanol. Finally, blending equipment at distribution terminals must be upgraded or replaced in order to blend ethanol with gasoline blendstock. Making these changes may require securing local, state and federal permits.

Changes must also be made at retail service stations. Before a changeover from MTBE to ethanol-blended fuel, it will be necessary to empty all fuel and water from storage tanks so as not to render ethanol-blended fuel unusable.

At the refinery, gasoline blendstock must be changed in order to accept ethanol and meet RFG emissions requirements. As refiners move to ethanol-blended RFG, they experience some loss in production capability due to changes necessary to accommodate ethanol's higher evaporative properties, and to counter ethanol-blended gasoline's higher toxic emissions and distillation characteristics. Some refiners may be able to change refinery processes in order to produce RFG to be blended with ethanol, others may be forced to decrease RFG production. Addressing these changes does not only require refinery process changes, but may also require refinery capital investments (which may require local, state and federal permits).

At this time, little RFG is expected to be produced without ethanol, although oxygenates like ethanol are no longer required. Replacing the octane previously provided by MTBE is difficult, and, can reduce gasoline volume if the octane is made up by refining processes. While ethanol is not as clean burning as MTBE, it is a cleaner component than most petroleum components, so it helps refiners to meet their fuel emission requirements.

The Energy Information Administration (within the U.S. Dept. of Energy) predicts that the availability of ethanol storage and transportation may be an even greater challenge during the first half of 2006 than finding additional ethanol supply. They are predicting that the east Coast RFG market will consume an additional 90 thousand barrels of ethanol a day. That is 2.5 times greater than all of the ethanol moved to the east Coast in 2005. Rail cars and barges may not be available.

APIP believes that, to be successful, fuel transitions should be based on the free and unfettered functioning of fuel markets. Market mechanisms are most effective in providing companies with appropriate indicators and in ensuring a rapid response to changes in market conditions or transitional problems that may occur. Changes to these market indicators by government – such as calling for waivers from clean fuel regulations in light of concerns about possible volatility in fuel prices – will only cause market uncertainty, sending confusing information to markets in transition, which could prolong the transition period. While there are already mechanisms in place to deal with true market supply disruptions, governments have less authority to intervene during a fuel transition under the provisions of the Energy Policy Act of 2005.

Since the Energy Policy Act of 2005 did not call for a national, ordered phase-out of MTBE, individual companies are making individual decisions on how best to deal with the end of the RFG oxygen mandate and the use of oxygenates. The elimination of the RFG oxygen mandate, the state MTBE bans (26 so far), and announcements by refiners, pipelines and marketers indicate a likely rapid reduction in the use of MTBE. Companies are taking into account various factors such as customer preference, state laws, pipeline decisions, distribution system capabilities, and information from government agencies such as the Energy Information Administration (EIA).

Recent data indicate that there is about 158,000 b/d of MTBE being used. If ethanol were substituted for this amount, we would need roughly 225,000 b/d of additional ethanol nationwide. However, some of the MTBE loss could and likely will be made up through the use of different compounds and increased gasoline production. Moreover, the fuels market is world-wide, so we assume that increased reliance on imports is an option that some suppliers are also considering. We should keep in mind that, while there is a substantial volume of MTBE, it is a small component of the total reformulated gasoline market and an even smaller portion of the world fuels market.

We strongly support continued efforts by EIA to monitor the supply and demand dynamics of the market, and provide timely updates to their initial study. API and its members are happy to collaborate in any such effort.

This concludes my prepared remarks and I would be happy to answer any questions that you might have.