



**WRITTEN STATEMENT OF  
NATIONAL PETROCHEMICAL & REFINERS ASSOCIATION (NPRA)  
AS SUBMITTED TO THE  
SUBCOMMITTEE ON ENERGY AND THE ENVIRONMENT  
Committee on Science, Space and Technology  
United States House of Representatives  
on  
“Conflicts and Unintended Consequences of Motor Fuel Standards”**

**Nov. 2, 2011**

## **I. Introduction**

Chairman Harris, Ranking Member Miller and Members of the Subcommittee, thank you for giving me the opportunity to testify at today's hearing dealing with conflicts and unintended consequences of motor fuel standards. I'm Brendan Williams and I serve as the Senior Director of Advocacy of NPRA, the National Petrochemical & Refiners Association. Since virtually every American drives or travels in vehicles powered by motor fuels manufactured by NPRA members, the topic of this hearing directly affects just about everyone in our nation.

NPRA is a trade association representing high-tech American manufacturers of virtually the entire U.S. supply of gasoline, diesel, jet fuel, other fuels and home heating oil, as well as the petrochemicals used as building blocks for thousands of vital products in daily life. NPRA members make modern life possible and keep America moving and growing as they meet the needs of our nation and local communities, strengthen economic and national security, and provide jobs directly and indirectly for more than 2 million Americans.

For well over 100 years our refining members have been serving the American people by manufacturing the most efficient form of safe, proven and reliable motor fuels. NPRA members have done this while making tremendous strides to improve the environment, strengthen America's economy and provide good-paying jobs for American workers – many of them union members.

There is a very close connection between federal energy and environmental policies. Unfortunately, these policies are often debated and decided separately and without coordination. As a result, positive impacts for one policy area sometimes conflict with or even undermine goals and objectives in the other. Congress and the administration can advance both the cause of cleaner fuels and preserve the domestic refining industry and the jobs it supports by adopting this principle of balance as part of our nation's energy and environmental policies.

A healthy and diverse U.S. refining industry serves the nation's interest by maintaining a secure supply of energy products. Rationalizing and balancing our nation's energy and environmental policies will protect this key American resource. Given the challenges of the current and future refining environment, America is fortunate to retain a refining industry with many diverse and specialized participants. Refining is a tough business, but the continuing diversity and commitment to performance within the industry demonstrate that it has the vitality needed to continue its important work, especially with the help of a supply-oriented national energy policy.

We support sound and sensible environmental and other regulations. Our members are strongly committed to clean air and water, have an outstanding record of compliance with Environmental Protection Agency and other regulations, and have invested hundreds of billions of dollars to dramatically reduce emissions as measured by EPA.

As a result of these emissions reductions by our members and by other industries, America's air today is cleaner than it has been in generations. Refiners have cut sulfur levels in gasoline by 90 percent just since 2004. We have also reduced sulfur in diesel fuel by more than

90 percent since 2005 and reduced benzene in conventional gasoline by 45 percent since 2010. EPA data shows that total emissions of the six principal air pollutants in the United States have dropped by 57 percent since 1980 and ozone levels have decreased by 30 percent. These reductions occurred even as industrial output and the number of vehicles on the road have increased. EPA data indicates there will be continued reductions in the years ahead under regulations already in place.

Refiners have spent nearly \$50 billion just to remove sulfur from gasoline and diesel fuel and to manufacture reformulated gasoline. NPRA members have additionally addressed requirements for low Reid Vapor Pressure gasoline, including specially blended fuels required by State Implementation Plans under the Clean Air Act (CAA), which have reduced hydrocarbon emissions, an ozone precursor.

Despite the great progress we have made in environmental stewardship under the CAA and other laws, we are concerned that EPA and other agencies have at times moved from regulation to overregulation, making unreasonable and often conflicting demands on our members to spend enormous sums to make changes in their manufacturing processes that bring little or no significant environmental benefit.

## **II. Unintended Consequences**

The demands of environmental overregulation – some of which are impossible to achieve without coming in conflict with other regulations – would raise energy costs for every American consumer. They would also strengthen foreign competitors eager to replace American manufacturers and American workers, weaken the U.S. economy, make America more reliant on nations in unstable parts of the world for vital fuels and petrochemicals, and endanger our national security.

These are not alarmist statements – they are simple facts about the consequences of overregulation. The refining industry has historically been very cyclical and volatile financially. A Department of Energy report issued in March found that refining margins have been continuously decreasing over the past four years (Exhibit A). The report also concluded that the compounded burden of federal regulations was a significant factor in the closure of 66 petroleum refineries in the United States in the past 20 years (Exhibit B). Just since 2008, the recession and refinery closures have led to 3,000 lost jobs at American refineries. A handful of refineries are threatened with closure in the next few months if they cannot be sold. Some of the lost supply from shuttered refineries has been made up through capacity expansions at other facilities and overall capacity has still been increasing. However, the rate of new capacity coming online is decreasing due to financial pressures and the threat of overseas competition – factors that are exacerbated by a domestic environment of overregulation.

We've seen how much of the American textile, steel, auto, appliance and other manufacturing industries have moved to foreign nations in recent decades, with the tragic loss of millions of American jobs. We don't want the same thing to happen to our members and their workers if overregulation forces much of the refining industry to move from the United States to other nations as well. At a time of high unemployment and a poorly performing national

economy, the last thing America needs to do is worsen conditions for another important U.S. manufacturing sector.

The manufacturers of motor fuels are being hit with a regulatory blizzard that poses a significant threat to both refinery operations and our nation. Some of these regulations involve what are called Tier 3 regulations to reduce sulfur in gasoline, requirements under the Renewable Fuel Standard (RFS) involving ethanol and other biofuels, and greenhouse gas (GHG) regulations to name a few.

We believe America's national interest would best be served by comprehensive and objective cost-benefit analyses of these and other federal regulations. Existing regulations also need to be examined so those that do more harm than good can be eliminated. It is not realistic to demand that every last molecule of emissions be eliminated – no matter how insignificant, and regardless of the cost in lost jobs, harm to consumers, and harm to our nation. Yet all too often, overregulation of motor fuels and environmental overregulation takes this approach.

### **III. Conflicting Regulations**

We understand that different federal and state regulatory agencies have a hard time balancing the need for effective regulation with the demands of meeting sometimes conflicting decisions from the courts, positions of public interest groups and even newly enacted laws. However, the size, scope, and cumulative burden of current and impending regulatory activity is creating both significant regulatory uncertainty and a slew of conflicting regulations that will impose significant burdens on domestic fuel manufacturers.

Looking in more detail at the various regulations facing our industry helps illustrate the problem of conflicting regulations.

#### **A. Tier 3 Gasoline Sulfur Regulations Conflict with GHG Requirements**

Under the CAA, EPA has adopted a series of increasingly stringent rules to reduce the amount of sulfur allowed in gasoline. Since 2004, EPA's Tier 2 rules have reduced sulfur levels in gasoline by 90 percent, from an average of 300 parts per million in 2004 to an average of 30 parts per million today. We have seen no evidence that further sulfur reductions to enable future vehicle technologies are needed.

Nevertheless, EPA is proceeding with what is known as a Tier 3 rulemaking as part of its general authority to regulate fuels under the CAA. The rule would impose a high-cost, minimal-benefit regulatory requirement on America's already heavily regulated fuel supply. The rule could lead to significant domestic fuel supply reductions, higher petroleum product imports, potentially increased consumer costs, increased refinery emissions, closed U.S. refineries and reduced energy security.

A process called hydrotreating is the principal technology used to reduce sulfur in petroleum products, including motor fuels such as gasoline and diesel. This and other such technologies require energy consumption that results in increased GHG emissions and will also

increase emission of other criteria pollutants. As a result, a regulation requiring a reduction of sulfur in petroleum fuel increases emissions that refiners are being told they must reduce under other CAA regulations.

Although refiners have already slashed sulfur levels in gasoline by 90 percent in the past seven years, EPA's Tier 3 rulemaking could require further reductions in sulfur levels in gasoline to an average of 10 parts per million – a 70 percent change from today's already low levels, while also reducing the gasoline volatility. EPA expects to issue a proposed rule by the end of 2011 and a final rule in 2012. There is no reason to regulate sulfur levels further. Sulfur emissions from cars are minimal.

In addition, the Energy Independence and Security Act of 2007 (Section 209) requires EPA to conduct an anti-backsliding study to determine whether mandated renewable fuel volumes will adversely impact air quality. The results of this study are critical to assessing whether or not the current RFS will hamper air quality, as well as how to mitigate such impacts and whether changes to the petroleum portion of the fuel supply are the most cost-effective way to address the issue.

The anti-backsliding study was due in the summer of 2009. It was to be followed up with promulgated regulations to mitigate any potential impacts identified in the study by December 2010. Congress clearly required the study as a precursor to potential regulations, which the statute states should occur 18 months later. However, EPA has not completed this study, but intends to move forward with the Tier 3 proposal anyway. The agency said it will release the study at the same time it releases its proposed Tier 3 regulations. This is contrary to congressional intent, which clearly indicated the anti-backsliding study was to be completed prior to any new regulations being promulgated. This was to be a sequential schedule, not a concurrent one. EPA should release the study to assess the feasibility of and proper approach to any additional fuels regulations.

## **B. E15 and the Renewable Fuel Standard**

Another set of EPA regulations of motor fuels that is causing regulatory conflicts and problems for refiners and consumers involves the size and scope of the ethanol mandate created in the 2007 expansion of the RFS.

EPA published a decision last November for approval of a partial waiver with conditions that would allow gasoline containing 15 percent ethanol – known as E15 – to be sold into the marketplace for use in cars and light trucks produced in model year 2007 and later. EPA later ruled that E15 could be sold for use in vehicles produced in model year 2001 and later. In addition to being illegal, these decisions hold the potential to create significant problems in the marketplace.

As NPRA and many other groups argue in a lawsuit, EPA does not have the legal authority to grant a partial waiver. Section 211(f)(4) of the CAA is clear on this point, stating that EPA has to determine that any fuel or fuel additive “will not cause or contribute to a failure of *any* emission control device or system (emphasis added).” The CAA does not give EPA

discretion to approve a fuel or fuel additive for sale if it will cause or contribute to the failure of *some* emission control devices and not others.

Because E15 would theoretically be sold under the same canopy as regular gasoline, there is a high likelihood of consumer misfueling. This is a concern because several studies show that gasoline blends containing more than 10 percent ethanol could lead to engine damage in older vehicles and non-road engines, such as those in chain saws, lawnmowers, boats and snowmobiles. For example, a recent study by the National Renewable Energy Laboratory on testing conducted on the effects of E15 on three outboard boat engines found that E15 caused problems with engine performance, increased fuel consumption and increased nitrogen oxide emissions.

Ironically, an increased ethanol blend could also damage older cars' catalytic convertors, which are installed to reduce emissions. In addition to engine and catalytic convertor damage, studies have shown that as ethanol content in fuel increases it burns hotter and is more corrosive. The combined effect of fuel burning hotter and the corrosive effects of ethanol create the possibility for serious physical injury to people who may misfuel and potential physical damage to vehicle fuel tanks and fuel dispensing equipment. Sufficient testing to assess the impact of these fuel blends on all automobiles – both old and new – and non-road engines has not been completed.

Industries ranging from outdoor power equipment manufacturers, to automakers to food producers have all expressed concern over EPA's E15 waiver. However, EPA has ignored ongoing testing related to E15 and made a premature decision to approve the fuel. The same decision to approve E15 also contains a proposal for E15 misfueling mitigation. Therefore, EPA made a decision knowing that it would cause problems and initiated a rulemaking at the same time to mitigate the problems that the EPA itself created.

EPA could have decided to deny the request to approve E15 as gasoline, but chose to approve it partially and conditionally. This decision has put refiners and consumers at significant risk and the E15 misfueling mitigation rule – a cautionary label posted at service stations – is a woefully ineffective warning device.

The American people are the losers in this situation because EPA has violated President Obama's 2009 commitment to them to put science ahead of politics. Consumers rely upon their government to ensure that the products offered are safe for the intended use. EPA's partial waivers for E15 ignore this responsibility. American families, farmers, truckers and businesses rely on NPRA members millions of times every day to provide affordable, reliable and safe fuels for use in their gasoline-powered on-road and non-road engines. EPA's partial waiver decisions undermine this reliance.

EPA is rushing to bring E15 to the marketplace and putting consumers at risk. Congress should not allow EPA to continue down this path. Congress should repeal EPA's partial waivers for E15.

This problem with EPA's E15 decisions is just one example of the numerous problems associated with an ill-crafted federal RFS. The existing program contains an extremely aggressive schedule for introducing a large amount of ethanol into the marketplace. Such an implementation schedule raises questions of feasibility, liability and other economic costs for both refiners and consumers. If the existing RFS program is carried out without changes, it will create great market and economic uncertainty, which will in turn threaten additional refining investment and job growth and harm consumers.

The RFS is challenging and faces several hurdles. Given the aggressive schedule of the mandate and the limits of what fuel and vehicle infrastructure can handle, our nation will soon face a practical limit into the amount of ethanol that can be pushed into the fuel supply without causing significant consumer disruption. This so-called "blendwall" will be reached when nearly all of the gasoline in the country contains 10 percent ethanol and there is a portion of E85 (fuel containing 85 percent ethanol, 15 percent gasoline) being sold for use in Flex Fuel Vehicles (FFVs).

However, consumers have been slow to accept E85 and it does not shape up to be a viable compliance option for the RFS. For example, E85 has low energy content and could be used in cars not designed for the fuel or in small engines. No small engines are designed for E85 and only a small fraction of the fleet of cars is designed for the fuel. E85 requires an expensive investment at retail stations because of the corrosive nature of ethanol. This issue is yet another in a panoply of problems associated with the current structure of the RFS. Congress should address these issues to protect American drivers and consumers.

#### **IV. Conclusion**

NPRA members want a clean environment and have worked hard and invested heavily to achieve that goal. We have made big reductions in emissions, and more reductions will continue under existing regulations. But we want sound science and cost-benefit analyses to be used to examine which environmental regulations are in the best interests of the American people, looking at a broad range of criteria.

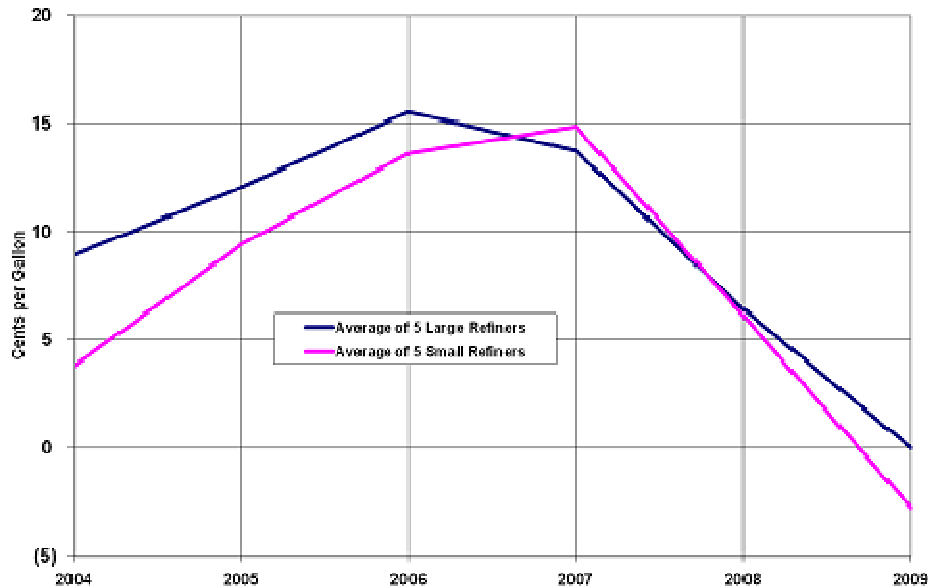
Even when excessive regulations are imposed with the best of intentions, they can have harmful unintended consequences. Sometimes these harmful consequences – like a rise in consumer energy costs – are welcomed by opponents of fossil fuels, because these higher costs tilt the playing field to make other energy sources more competitive in the marketplace.

EPA should not have unchecked power to take any action it wants – without specific authorization by Congress – in the single-minded pursuit of unrealistic and harmful overregulation. It's time for higher consumer costs, lost jobs, and damage to America's economic and national security to be considered as relevant factors in weighing whether ever-more stringent regulations do more harm than good.

NPRA is ready to participate in an intellectually honest dialogue about how to build a stronger economy, a brighter energy future and a more prosperous America.

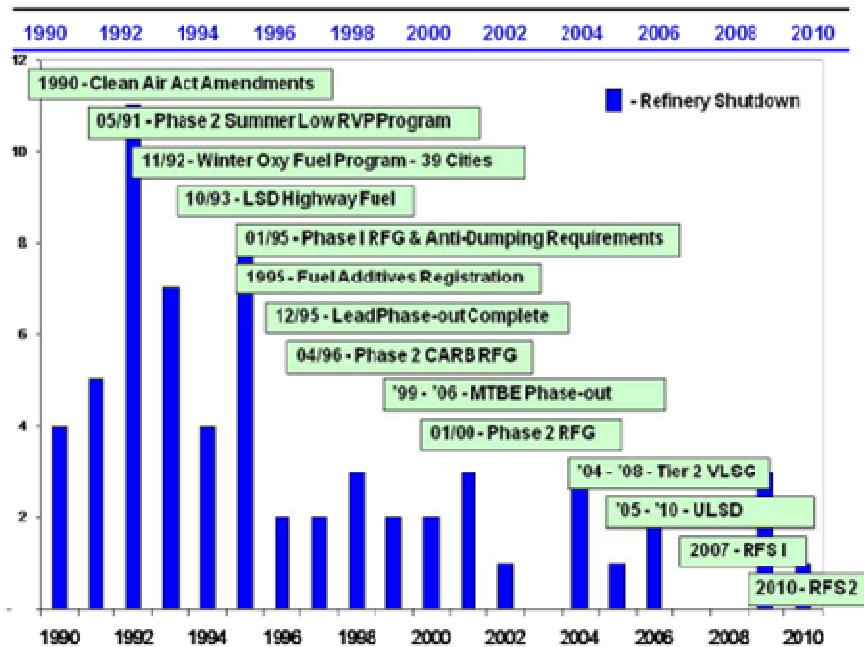
## Exhibit A

Figure 8. Sample Refining Margins for Large and Small Refiners 2004 – 2009



## Exhibit B

Figure 9. U.S. Refined Product Environmental Regulations 1990-2010



Source: SAIC, 2010, EIA Table 15 - Refineries Permanently Shut Down, 2010.



Source: U.S. Department of Energy, Office of Policy and International Affairs, *Small Refinery Exemption Study – An Investigation Into Disproportionate Economic Hardship*, p. 28-30, found at:  
<http://www.epa.gov/otaq/fuels/renewablefuels/compliancehelp/small-refinery-exempt-study.pdf>