



Mitch Bainwol  
President and CEO

October 6, 2011

The Honorable Lisa P. Jackson  
Administrator  
USEPA Ariel Rios Building  
1200 Pennsylvania Avenue, NW  
Washington, DC 20004

RE: Changes to U.S. Retail Gasoline

Dear Administrator Jackson:

EPA has long recognized that vehicle technology and the fuel employed with that technology need to work in concert as an integrated "system" so that vehicles can operate efficiently and achieve the lowest technologically and economically feasible emissions targets. The prior Tier 2/LEV II rules coupled vehicle emission reductions with improved fuel quality. The upcoming Tier 3/LEV III rules that EPA and the California Air Resources Board are developing should continue this approach, also requiring cleaner fuels to be provided in the marketplace.

The Tier 3/LEV III rules should include a nation-wide retail gasoline sulfur cap of 10 parts per million (ppm). Excess sulfur "poisons" the catalyst, reducing its ability to remove exhaust emissions. Prolonged exposure to excess sulfur can permanently diminish the catalyst's effectiveness even after steps are taken to purge the catalyst of sulfur. Current Tier 2 gasoline sulfur caps, combined with broad compliance flexibilities (*e.g.*, allowing fuel producers to calculate averages across refineries), allow a wide and unpredictable range of actual sulfur content in the marketplace. Going forward, this situation will compromise automakers' ability to meet the upcoming Tier 3/LEV III standards and hinder the introduction of advanced technology systems needed to meet anticipated future fuel economy and greenhouse gas regulations.

Currently, the U.S. ranks 46th globally in its gasoline sulfur limit. EPA's current standard is well behind the standards of Japan and the European Union, where sulfur levels in retail gasoline may not exceed 10 ppm. It is therefore timely for the U.S. to put a 10 ppm cap in place.

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In addition to facilitating compliance with future vehicle requirements, a 10 ppm sulfur cap would immediately reduce emissions of vehicle sulfur oxides in the existing fleet by an estimated 15,626 tons per year. The exhaust emissions of legacy vehicles, current production vehicles and future production vehicles would all benefit, as would all on-highway and non-road gasoline engines, all large and small gasoline engines, and even stationary and mobile power sources.

Enclosed is our White Paper with an in-depth discussion of the need to reduce market gasoline sulfur. In addition to sulfur reductions, the Alliance supports reducing summer gasoline vapor pressure, a change that will help reduce overall mobile source emissions by decreasing evaporative emissions. Furthermore, to help achieve future requirements for the reduction of greenhouse gas emissions, we also recommend increasing the minimum market gasoline octane rating, commensurate with increased use of ethanol. Adding ethanol to gasoline increases its octane rating. To attain necessary octane levels, it is important that refiners not be permitted to reduce base gasoline octane ratings in light of the additional octane contribution from higher ethanol.

We would be happy to discuss our recommendations in more depth with you. If you or your staff have specific questions regarding these recommendations or any comments provided within this letter, please contact Julie Becker, Vice President for Environmental Affairs at the Alliance (202-326-5511; [jbecker@autoalliance.org](mailto:jbecker@autoalliance.org)).

Sincerely,



Mitch Bainwol

MB/sf

Enclosures

cc: Gina McCarthy, Assistant Administrator, OAR  
Margo T. Oge, Director, OTAQ