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GrowthEnergy.org

May 15, 2020

Dr. Zaida Figueroa  
Designated Federal Officer  
Science Advisory Board  
U.S. Environmental Protection Agency  
Washington, DC 20460  
By Electronic Mail

Dr. Figueroa:

Thank you for this opportunity to provide comments in response to the formation of the COVID-19 Review Panel within the Science Advisory Board (SAB). Growth Energy is the world's largest renewable fuel organization representing 103 biofuel producers, nearly 100 associated businesses in the biofuel supply chain, and tens of thousands of biofuel supporters across the country. Our members are committed to improving our world's air quality through the use of cleaner burning, earth-friendly biofuels.

The current crisis has highlighted the need to examine the importance of air quality and its impact on human health and the environment. The panel's charge identifies specific areas of need for further refinement and improvement of research. Among those areas, the charge encourages review of "Environmental Factors affecting transmission and severity of COVID-19" and specifically asks several key questions: "1) Can particulate emissions in the atmosphere serve as a vehicle for the transmission of SARS-CoV-2?; and 2) Does exposure to air pollutants, including wildland fire smoke or other air pollutants (e.g., ozone, particulate matter, diesel exhaust, pollen) increase the susceptibility to respiratory viruses like SARS-CoV-2? Or exacerbate existing COVID-19 infection?"

As you explore air pollution's impact on human health, including heightened risk from COVID-19 among vulnerable communities, we urge SAB members to examine the wide body of related research pointing to readily available solutions, including ethanol, that can deliver immediate air quality benefits. Federal regulators have [long acknowledged](#) that biofuels reduce greenhouse gas emissions by 39 percent or more, but ethanol also serves as the single most affordable and abundant alternative to toxic fuel additives, including benzene, toluene, ethylbenzene, and xylene. These petroleum-based aromatics play a dominant role in the formation of toxic emissions linked to cancer, as well as neurological, cardiovascular, and reproductive damage. They also drive significant increases in particulate emissions, which cause asthma and contribute to heart and lung disease.

Now more than ever, it's critical that EPA explore the full impact of petroleum-based aromatics on air quality and urge you to review [recent analyses](#) around ethanol that shows significant reductions in particulate emissions, as well as air toxics.

These two recent reports authored by Dr. Steffen Mueller at the University of Illinois Chicago's Energy Resource Center show the substantial health and air quality benefits of using ethanol to replace harmful aromatics found in gasoline. The first [report](#), "Avoided Mortalities from the Substitution of Ethanol for Aromatics in Gasoline with a Focus on Secondary Particulate Formation", discusses how aromatics in gasoline exhaust are a major contributor to fine particulates (PM2.5). The report also discusses how refiners have been able to use ethanol's octane value to reduce this harmful aromatic content. Ultimately, the report specifically states, "based on the significant mortalities associated with aromatics in gasoline we encourage the development of incentives or regulatory frameworks to reduce aromatics in our fuels."

Dr. Mueller's second [report](#), "Cancer Reductions from the Use of High-Octane Ethanol-Blended Gasoline with a Focus on Toxic Air Compounds", examines the health impacts of specific air toxics, including a subset of aromatics known as polycyclic aromatic hydrocarbons (PAH). The report outlines how mortalities can be avoided by ethanol as a substitute in high-octane fuels. The report exposes how urban communities are most at risk and how, with the use of a 25 percent ethanol blended fuel (E25), these harmful emissions can be reduced, and lives can be saved.

Additionally, through multiple rulemakings at EPA over the last decade including those on greenhouse gas emissions from vehicles and the Tier 3 fuel regulation, Growth Energy has submitted a wealth of data to further support the conclusion that ethanol decreases harmful particulates. Studies done by Zhang, Maricq, Szybist, Storey, and others in our submissions show that a 20 percent ethanol blend can significantly reduce both particulate size and number in a variety of engines and vehicles. We are including [our submission](#) with the referenced studies for your review.

We strongly urge the panel to review the wealth of data showing the connection between particulate matter and negative health impacts. We also urge you to review the research that shows the substantial benefits of higher biofuel blends through the reduction of harmful particulates and air toxics.

Thank you in advance for your consideration.

Sincerely,

A handwritten signature in blue ink, appearing to read "Chris Bliley".

Chris Bliley  
Senior Vice President of Regulatory Affairs  
Growth Energy