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NATIONAL OFFICE

1301 Pennsylvania Ave., NW
Suite 800
Washington, DC 20004-1725
Phone: (202) 785-3355
Fax: (202) 452-1805

www.Lung.org

January 28, 2014

The Honorable Gina McCarthy
Administrator
U.S. Environmental Protection Agency
Air and Radiation Docket and Information Center
Mailcode: 2822T
1200 Pennsylvania Avenue NW
Washington, D.C. 20460

RE: Docket ID No. EPA-HQ-OAR-2013-0479

Dear Administrator McCarthy:

The American Lung Association appreciates the opportunity to comment on the 2014 Standards for the Renewable Fuel Standard Program. Millions of people live in parts of the nation that U.S. Environmental Protection Agency (EPA) has recognized as having air quality that is unhealthy to breathe. As of December 2013, 149 million people lived in areas where the air quality failed to meet official national air quality standards. Of those, 123 million lived in areas where ozone too frequently reached unhealthy levels. Over 68.7 million lived where year-round $PM_{2.5}$ levels were too high.[1] They need all the available tools to reduce emissions to clean up the air in their communities.

Tailpipe pollution is a major source of emissions that contribute to this widespread burden of ozone and particulate matter pollution. While individual cars and trucks now have far lower emissions than in years past, the entire fleet of vehicles currently on the road emits large quantities of gaseous and particulate matter pollution, including ozone precursors such as carbon monoxide, nitrogen oxides, and volatile organic compounds. Motor vehicles also emit other toxic air pollutants, including known carcinogens such as benzene, 1, 3-butadiene and formaldehyde.

Climate change and ozone scientists warn that the buildup of greenhouse gases and the climate changes caused by it will create conditions, including warmer temperatures, which will increase the risk of unhealthful ambient ozone levels. Higher temperatures can enhance the conditions for ozone formation. [2] Even with the steps that are in place to reduce ozone, evidence warns that changes in climate are likely to increase ozone levels in the future in large parts of the United States.[3]

Many groups face higher health risks from traffic-related air pollution
Near roadway concentrations of vehicle emissions are higher than surrounding areas. About 17 percent of housing in America is located within 300 feet of a major roadway, railroad or airport where concentrations of harmful pollutants are likely higher than areas further away.[4] Over 18.2 million Americans meeting the federal poverty definition live in counties with high

ozone pollution.[5] Evidence shows that people with low incomes may bear a greater burden from air pollution.[6]

Furthermore, individuals with pre-existing conditions such as asthma, chronic obstructive pulmonary disease (COPD), cardiovascular disease and diabetes face a greater burden from traffic related air pollution. There are 25.9 million Americans with asthma, including some 7.1 million children.[7] Ozone and particle pollution add to the burden they face every day. Diabetics may face an increased risk from particulate matter pollution due to its impact on their cardiovascular system. African Americans, Mexican Americans and people living near a central city have higher rates of diabetes.[8]

Near road way exposures have emerged as a health threat affecting a large segment of the North American population, not just those that are economically disadvantaged. A 2010 review of existing research by the Health Effects Institute concluded that those living, working or going to school within 300-500 meters of a major roadway are exposed to higher concentrations of traffic related pollution. This includes 30-45 percent of the North American population living in urban areas. The report identifies a causal relationship between traffic pollution and asthma exacerbation in children, and suggestive evidence of a causal relationship with onset of childhood asthma, non-asthma respiratory symptoms, impaired lung function, total and cardiovascular mortality, and cardiovascular morbidity.[9]

Studies since 2010 have added to the evidence showing harm to health associated with traffic-related air pollution. Rosenbloom et al, (2012) examined data from patients from 64 medical centers across the U.S. found increased risk of death for people with cardiovascular disease who live near major roadways.[10] Chen et al., (2013) found that, even in Canada where pollution levels are much lower levels than in the U.S., long-term exposure to traffic pollution was associated with higher risk of death from cardiovascular disease.[11] Andersen et al, (2011) found that years of exposure to pollution from traffic in Denmark may have increased the risk of developing COPD, a risk that may have even been enhanced in people who already had asthma or diabetes.[12]

The evidence of long-term harm to children from near-roadway exposures has also continued to expand. Newman et al, (2013) studied data from children in the Cincinnati area who spent the first year of their lives near a major highway. They found those children were more likely to have high hyperactivity scores when they reached school age, a risk factor for attention deficit/hyperactivity disorder (ADHD).[13] Grunzivea et al. (2013) found in a large study that Swedish children exposed to traffic in infancy were more likely to have asthma at age 12 with higher pollution.[14]

Children face special risks from air pollution because their lungs continue to grow into adolescence and because they are more active outdoors than adults. According to the American Academy of Pediatrics in their policy statement recognizing the health hazards of outdoor air pollution, a child's developing lung is "highly susceptible to damage" from air pollution:[15]

> Children and infants are among the most susceptible to many of the air pollutants. In addition to associations between air pollution and respiratory symptoms, asthma exacerbations, and asthma hospitalizations, recent studies have found links between air pollution and preterm birth, infant mortality, deficits in lung growth, and possibly, development of asthma.[16]

Like children, older adults face a greater burden from air pollution. As the body ages it is less able to defend against the effects of air pollution. Adults age 65 and older are also more likely to have many of these diseases that are linked to higher risk.

In addition, healthy adults who work or exercise outdoors also may be a greater risk of harm from air pollution. Studies such as those of lifeguards in Texas,[17] hikers in New Hampshire,[18] and farm workers in California[19] indicate that being outdoors longer, with often greater physical exertion increases the amount of polluted air breathed.

E85 and biodiesel are part of the solution

Our Upper Midwest chapter, working over the past 15 years in the states of Illinois, Iowa, Minnesota and Wisconsin, has actively promoted the use of biofuels to reduce air pollution and to improve lung health. Using E85 in a flex fuel vehicle can significantly reduce lifecycle carbon dioxide emissions, carbon monoxide pollution, and many other harmful pollutants, including benzene, a known human carcinogen.[20] Likewise, biodiesel reduces harmful particulate and volatile organic compounds from tailpipe emissions and is recognized as an advanced biofuel for its greenhouse gas emission reduction capabilities.[21]

Our comments focus on EPA's request for information regarding the following:

- the manner and extent to which RIN prices are affecting prices for the nation as a whole, and any associated changes in consumption; and
- data from the public that would help estimate the impact of lowering the volumetric requirements on the incentive to sell ethanol blends higher than E10.

Although many of the following examples are specific to Minnesota, data trends are similar in the neighboring Midwest states.

Impact of RIN pricing on E85 and biodiesel consumption

In 2013, the value and impact of the RFS in increasing the availability and use of E85 became very apparent in the Midwest states. EPA noted in its proposal that E85 has historically been more expensive that E10 when adjusted for energy content, which has reduced the consumption of E85 even in flex fuel vehicles. However, as EPA noted, the change in RIN pricing has impacted the consumption of E85. As Renewable Identification Number (RIN) values increased through the spring and summer, retailers were able to provide E85 at a more competitive price compared to gasoline, at times discounting up to one dollar or more per gallon compared to regular E10 fuel. Flex fuel vehicle drivers responded, often waiting in line to fill with E85, resulting in a subsequent dramatic increase in sales.

According to the Minnesota Department of Commerce's comprehensive monthly sales survey in April of 2013, the impact of RIN values resulted in sales of E85 exceeding 1 million gallons per month for the first time in six months, and increased to more than two million gallons in August and September.[22] E85 sales increased by 47 percent during the third quarter of 2013, compared to the previous year.[23] Neighboring states experienced similar results. The Iowa Department of Revenue reported that third quarter E85 sales in 2013 nearly doubled from the amount of E85 sold during the first quarter.[24] In Illinois, retailers have reported to our staff that E85 sales have nearly tripled during the same time frame.

The competitive pricing and increased demand also encouraged new flex fuel (E85) retailers and infrastructure growth. Through our work with retailers in 2013, we have identified 14 new high volume sites that began offering E85 in Minnesota, ten in Illinois, and nearly 20 E85 installations occurred in Wisconsin. More installations are being planned throughout the region when spring construction season begins in early 2014.

In addition to increasing sales of these fuels, RINs also encourage demand for maximizing the ethanol blend in E85. For example, ethanol flex fuel can now be blended at a percentage range between 51 to 85 percent. Increased RIN values encouraged the use of the highest ethanol blend recommended for the season. Retailers offering the highest recommended percentage were able to price significantly better than those offering a blend of 51 to 65 percent. This increased the use of the highest available blend, thereby strengthening the effectiveness of the RFS, and utilizing more renewable fuel.

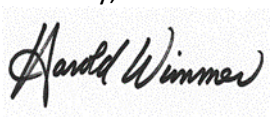
Biodiesel saw a similar increase in use. Fleets began using higher biodiesel blends. For example, the main commuter bus line serving the Minneapolis/Saint Paul metropolitan area began using a 20 percent biodiesel blend (B20) in summer of 2013, citing both the economic advantages as well as the renewable and emissions reductions benefits.[25] Retailers are providing higher biodiesel blends as well, and Minnesota's first biodiesel blender pump retailer opened. [26]

Conclusion

To conclude, the RFS has been effective and RIN values have provided the encouragement and incentive for the demonstrated increase in the use of E85 and biodiesel. As the recent experience in Minnesota, Iowa and Illinois shows, there is an opportunity to increase E85 use when the price at the pump is favorable for consumers. The growth of E85 and biodiesel can help the nation achieve reductions of ozone precursors, particulate matter, carbon monoxide, toxic and greenhouse gas emissions. The American Lung Association asks the EPA to fully consider the benefits of E85 and biodiesel growth as it accepts public comment on the Renewable Fuels Standard.

Thank you for the opportunity to provide comments.

Sincerely,



Harold Wimmer
National President & CEO
American Lung Association

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