Air Quality Forum – Comment Letter/Messages

Notice of Proposed Rulemaking to Modifications to Fuel Regulations to Provide Flexibility for E15; Modifications to RFS RIN Market Regulations

- **Executive Summary**

Proposed points for AQF comment letter (Due 4/22)

- **Emissions**
  - EPA asserts that:
    - E15 with a RVP of 9psi is “substantially similar” to E10 with a RVP of 9psi, the fuel used to certify Tier 3 light duty vehicles, and
    - “E15 would have similar effects on emissions (exhaust and evaporative), materials compatibility, and driveability for light-duty motor vehicles certified using Tier 3 E10 certification fuel.”
  - Tier 3 vehicle certification standards, which use E10 certification fuel, apply to MY2017 and newer vehicles.
  - According to the *Transportation Energy Data Book* from Oak Ridge National Laboratory, the fleet turnover ratio is approximately 15 years with the average age of light-duty vehicles at an all-time high—11.6 years (2016).
  - There is concern that for vehicles older than MY2017 which were not certified by manufacturers under Tier 3, E15 would not have similar effects on emissions.
  - According to Table II E-1, Example Emission Impacts of E15 Blends Based on EPAact Model (in the proposed rule), there is already an increase for NOx, NMOG, and PM created by E15 market fuel at 9 psi RVP. Approving the 1.0 psi waiver for E15 is expected to increase those pollutants making matters worse.

- **Fuel economy**
  - According to Department of Energy, “A gallon of ethanol contains less energy than a gallon of gasoline, resulting in lower fuel economy when operating your vehicle.”
  - Ethanol contains about one-third less energy than gasoline. So, vehicles will typically go 3% to 4% fewer miles per gallon on E10 and 4% to 5% fewer on E15 than on 100% gasoline. Use of E15 will reduce fuel economy; consequently, issuing a 1.0 psi RVP waiver for E15 will increase the negative impact of the fuel on local and regional air quality.


- **Local Air Quality Concerns**
  - As mentioned above, the reduction in fuel economy is a step backwards when addressing air quality concerns. The Kansas City region currently maintains a 7.0 psi RVP requirement for the summer months and relies on a low RVP fuel product to comply with state SIPs and help keep the region in attainment for the ground level ozone.
NAAQS. According to the Oak Ridge National Laboratory study, “Carbon monoxide (CO) and hydrocarbons (HCs) decrease, whereas NOx and acetaldehyde typically increase with ethanol content. Depending on the vehicle, the increase may be of a magnitude that will be of significant concern.” However, the report continues, “If the ethanol blends are formulated for the same or lower Reid vapor pressure (RVP) and front end volatility; evaporative emissions should not increase relative to neat gasoline.” Therefore, the AQF recommends that all existing RVP rules remain in place for E15 and that E15 is not granted the 1.0 psi RVP waiver currently in place for E10 at this time. As a larger percentage of the national fleet becomes Tier 3 compliant, the waiver may become more acceptable.