The Fallout from an Unexpected U-Turn in Summer E15

By Brian L. Milne, DTN editor, analyst

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Proponents pushing for expanding ethanol's market share in the gasoline pool were handed multiple defeats this summer through court case losses, including at the U.S. Supreme Court over the Small Refinery Exemptions that proliferated during the Trump administration. Worse was the July 2 ruling by the U.S. Court of Appeals for the District of Columbia Circuit, which struck down the Environmental Protection Agency's (EPA) authority to grant a waiver for a 15% concentration of ethanol in gasoline during the summer high ozone season.

The inability to sell E15 from June 1 through September 15 has been a huge barrier in expanding domestic ethanol consumption. It will almost certainly restrain the volume of mandated renewables under the Renewable Fuel Standard (RFS), with the Biden administration's EPA delaying its Renewable Volume Obligation (RVO) proposal for this year and 2022 — reportedly due to political concerns. Under the Trump administration, the EPA finalized the 2020 RVO at 19.92 billion gallons against 30 billion gallons in the statute and made no proposal for 2021 due to the COVID-19 pandemic.

The Energy Independence and Security Act of 2007 substantially expanded the RFS program created with the Energy Policy Act of 2005. The statute states that 36 billion gallons of renewable fuels must be blended into road transportation fuels, in lieu of petroleum-based fuels, in 2022. There is no viable path to reach that target.

Faulty forecasting produced the figure, with gasoline demand at the time the legislation was drafted projected to increase sharply, year after year, without exception. In reality, gasoline demand plummeted during the Great Financial Crisis of 2008, which caused a recession with U.S. gasoline demand not recovering for several years. Energy Information Administration (EIA) data show finished gasoline demand wouldn't top the 2007 9.286 million bpd average until 2016 when demand reached 9.317 million bpd. It would only inch higher to 9.327 million bpd and 9.329 million bpd in the two subsequent years before slipping to 9.309 million bpd in 2019. In 2020, EIA reported gasoline demand at 8.034 million bpd, and it averaged 8.764 million bpd for the first seven months of 2021.

Multiple factors explain the flatlining in annual demand gains before the pandemic struck, including consumer behavior and increasing vehicle fuel efficiency. On August 5, joint proposals from the EPA and the Department of Transportation (DOT) doubled down on efficiency gains, while President Biden signed an executive order setting a target for 50% of all vehicle sales to have zero emissions in 2030. Vehicles with this capability include battery electric, plug-in hybrid electric, or fuel cell electric.

For its part, the EPA is using greenhouse gas standards that by 2026 would be equivalent to requiring vehicle mileage of 52 miles per gallon in test conditions or 38.2 mpg in real-world conditions, which is more than the Trump administration's 32.2 mpg and the Obama administration's 36.8 mpg. DOT's proposed standards require 8% efficiency gains each year from 2024 to 2026, which is estimated to lift the fleetwide average 12 mpg in 2026 compared with 2021.

Outside of flex-fuel vehicles that allow for higher ethanol blends, robust E15 sales during the months permitted, or an explosion in driving activity, domestic ethanol demand has little to no growth going forward. It is a stunning reversal from earlier this year when increased ethanol demand was expected through wider adoption of retail outlets selling E15.

What happened — and can it be reversed?

After years of saying they didn't have the authority, the EPA on June 10, 2019, granted E15 a one-pound Reid Vapor Pressure (RVP) waiver that allowed E15 to meet summer ozone fuel requirements in parts of the country that sell conventional gasoline. The EPA's evolved position hinged on its determination that E15 was "substantially similar" to E10, and by interpreting "containing" to mean "containing at least." Congress granted the EPA authority for the one-pound RVP waiver for E10 in 1979.

The EPA would codify this decision on January 1 through fuel regulation streamlining, with the recalibration of gasoline specifications easing the burden of meeting fuel requirements, while expanding the market for ethanol, fulfilling an obligation set by the Energy Policy Act of 2005.

American Fuel and Petrochemical Manufacturers filed a lawsuit against the EPA on June 11, 2019, challenging their decision to grant E15 the one-pound waiver, saying the agency didn't have the congressional authority. The case would eventually be heard by the D.C. Circuit Court of Appeals, with the court rejecting the EPA's interpretation that "containing" can also mean "containing at least."

"Consider a label that a bottle of wine 'contains 10% alcohol by volume.' No one would understand that number to be other than a literal statement of the actual amount of alcohol in a serving. By contrast, the label would be misleading if the wine contained only 5% alcohol or 15% alcohol," the court stated in its July 2 ruling. "Here, the ordinary meaning of the phrase 'containing gasoline and 10% ethanol' specifies the relative amount of ethanol in a unit of fuel, not the minimum or maximum ends of an unspecified range."

The court said Congress was deliberate in allowing the EPA to provide a one-pound waiver for E10, and if it was the intent of Congress to allow a one-pound waiver for E15, it would have spelled that out in the legislation. Biofuel industry groups have said they will pursue all options to overturn the court's ruling, including petitioning the Supreme Court for a hearing. These efforts are unlikely to succeed, with the court specific in that Congress must provide the authority for the E15 waiver.

Should the industry anticipate congressional action?

There are long odds that Congress — especially one as bitterly divided as the current Congress — would advance legislation granting the one-pound RVP waiver for E15 despite a large contingent of lawmakers who support the industry. There's also hostility toward ethanol by a bipartisan group of lawmakers. On July 20, U.S. Senators Dianne Feinstein, D-Calif., Pat Toomey, R-Pa., Bob Menendez, D-N.J., and Susan Collins, R-Maine, introduced the Corn Ethanol Mandate Elimination Act, which would end counting corn-based ethanol in meeting the RFS's annual volume obligation.

When EISA passed, the country was worried about peak oil, and oil prices were climbing at breakneck speed, with West Texas Intermediate reaching $100 bbl for the first time a couple of months later. Today's narrative is about peak demand.

As it stands now, E15 sales will not be allowed in the summer of 2022 or beyond, costing the industry billions of gallons in future demand growth. The Renewable Fuels Association (RFA) issued an analysis on August 4 that found if E15 is not allowed during the summer months, E15 sales volume for 2022 through 2024 would be flat with 2021, instead of the rapid growth expected before the court ruling.

"Some major fuel retailers and marketers who have expressed interest in offering E15 have indicated to RFA that they are much less likely to invest in E15 if they aren't able to sell the fuel year-round," said RFA Chief Economist Scott Richman. "In addition, if the court ruling stands, E15 sales volumes per station would likely return to pre-2019 levels, as retailers would again be forced to forgo E15 sales during the busy summer driving season, and consumers may be confused about fuel offerings."

RFA said there were about 130 retail stations offering E15 in 2015, which grew to more than 2,000 in 2020. Trend analysis and discussions the trade group had with fuel retailers, marketers, and terminal operators led to an RFA forecast that the number of retail outlets selling E15 would surge to 11,000 in 2024 if not for the court decision. They calculate E15 sales would be 12.6 billion gallons or 91% lower between 2021 and 2024 than expected if E15 is not allowed year-round, leading to a net loss of 630 million gallons valued at $1.3 billion.

In its analysis, RFA determined the potential economic loss over the longer term — between 2025 and 2030 — "would be substantially larger, as it was generally expected that E15 expansion would continue to accelerate, and E15 could fully, or mostly, replace E10 as standard gasoline by the end of the decade."

About the author

A 25-year veteran of the energy industry, Brian L. Milne serves in multiple roles, including editor and analyst. He has delivered dozens of presentations on various topics related to the energy markets and has been quoted widely in the media, including The Wall Street Journal, Barron's, USA Today, CNN, and major regional news outlets. Milne has authored numerous articles for international magazines exploring market dynamics and providing forward-thinking commentary and analysis. A graduate of Monmouth University in New Jersey, he has a B.A. in history and an interdisciplinary in political science (magna cum laude).

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