



Year-Round Sale of E15

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On April 12, 2022, the Biden Administration announced that it planned to allow E15—a fuel blend of 15% ethanol and 85% gasoline—to be sold this summer. E15 generally cannot be sold during the summer because it does not meet the gasoline Reid Vapor Pressure (RVP) requirements, which limit fuel volatility under the Clean Air Act (CAA), for the summer ozone season (June 1-September 15). The Biden Administration reports that the U.S. Environmental Protection Agency (EPA) will issue a nationwide emergency fuel waiver to allow E15 to be sold this summer. The Biden Administration reports it is taking this action, in part, to reduce gasoline prices. Gasoline prices have risen significantly since February 2022 due in part to a multitude of factors (e.g., crude oil supply and demand, supply chain issues, investor decisions, and the invasion of Ukraine by Russia). Some issues for Congress are what this action might mean for the nation's air quality, which consumers could potentially see a price change at the pump as well as the magnitude of the price change, and whether to make permanent the year-round sale of E15 (for example, as per S. 3787), among other things.

Clean Air Act RVP Requirements

The Clean Air Act authorizes the EPA Administrator to regulate fuels and fuel additives. Among other pollutants, the CAA regulates ground-level ozone (a primary component of "smog"), which negatively impacts human health among other environmental effects. One of the requirements intended to reduce smog is a limit on gasoline volatility because volatile organic compounds within gasoline evaporate more readily at higher temperatures and can contribute to smog formation. RVP is a common metric of gasoline volatility; the lower the RVP, the less volatile the gasoline. RVP requirements in Section 211(h) of the CAA—which apply to the 48 contiguous states and the District of Columbia—generally prohibit the sale of gasoline with a RVP greater than 9 pounds per square inch (psi) during the high ozone season (i.e., the summer months). The act provides some exceptions, including a waiver—the "one pound waiver" stipulating that ethanol-gasoline fuel blends containing 10% ethanol (E10) are subject to a RVP limit that is 1 psi greater than what would otherwise apply given certain conditions (e.g., the 9.0 psi standard for designated volatility attainment areas would subject E10 to a 10.0 psi limit). Further, the act provides exclusions from the waiver such that, upon notification by a governor that the RVP limit granted for E10 will increase air pollutant emissions in that state, the Administrator must revert to the 9 psi limit for that area. In some areas of the country, generally based on nonattainment for ozone, more stringent RVP limits apply (e.g., 7.8 psi RVP for conventional gasoline), with the one pound waiver added on. The regulations for gasoline RVP standards are available at 40 C.F.R. 1090.215.

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E15

E15 has had a short tenure as a motor vehicle fuel relative to conventional gasoline and E10. In January 2011, EPA approved the use of E15 in model year 2001and newer light-duty motor vehicles, and, in July 2011, EPA issued regulations to mitigate the misfueling of vehicles, engines and equipment with E15. E15 may not be used in on-highway and nonroad motorcycles, vehicles with heavy-duty engines (e.g., delivery trucks), nonroad vehicles (e.g., boats) and engines in nonroad equipment (e.g., lawnmowers). The U.S. Department of Agriculture (USDA) reports that "approximately 93 percent of the 263 million vehicles registered in the United States are able to use E15."

There is limited information about how E15 is used, what its cost is, and what impact it may have on the U.S. economy. The U.S. Energy Information Administration (EIA) does not track the amount of ethanol consumed as E15, nor does EIA track the daily price of E15. Ethanol has different fuel properties than gasoline, including a lower energy content and a higher octane rating. The Oak Ridge National Laboratory (ORNL) reports that a vehicle will typically go 4-5% fewer miles per gallon running on E15 than on 100% gasoline. The U.S. Department of Energy (DOE) reports that "ethanol contains less energy per gallon than gasoline, to varying degrees, depending on the volume percentage of ethanol in the blend. Denatured ethanol (98% ethanol) contains about 30% less energy than gasoline per gallon." DOE also reports that E15 is available in 30 states at more than 2,300 fueling stations. EIA reports there are more than 100,000 retail outlets that sell gasoline across the nation. EIA, which tracks ethanol production and consumption, reported that approximately 15 billion gallons of ethanol was produced in 2021, of which approximately 14 billion gallons were consumed.

Federal Agency and Court Actions

In April 2022, the Biden Administration reported its intent for EPA to grant an emergency fuel waiver that will allow for the sale of E15 this summer. EPA has granted emergency fuel waivers for gasoline RVP, dating back to 2005 according to publicly accessible documents. The EPA Administrator has the authority to temporarily waive the use of a fuel or fuel additive under 42 U.S.C. 7545(c)(4)(C)(ii).

In 2019, EPA issued a final rule allowing E15 to be sold year-round (i.e., the gasoline RVP "one pound waiver" provision). In short, EPA has justified this action by modifying its interpretation of CAA Section 211(h)(4) to interpret "containing" to mean "containing at least" 10% ethanol and considering E15 to be "substantially similar" to E10. The final rule was vacated in July 2021 by the U.S. Court of Appeals for the District of Columbia Circuit. In January 2022, the Supreme Court declined to review the DC Circuit Court's decision.

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