



Year-Round Sale of E15

Updated April 23, 2024

E15—a fuel blend of up to 15% ethanol and 85% gasoline—generally cannot be sold during the summer driving season (June 1–September 15) because it does not meet the gasoline Reid Vapor Pressure (RVP) requirements, which limit fuel volatility under the Clean Air Act (CAA). The statute, however, allows the U.S. Environmental Protection Agency (EPA) Administrator to issue a temporary fuel waiver of these requirements (42 U.S.C. §7545(c)(4)(C)(ii)) under certain conditions. On April 19, 2024, EPA announced it would allow "the continued sale of E15 during the summer driving season" to address "extreme and unusual fuel supply circumstances caused by a confluence of events, including the ongoing war in Ukraine and conflict in the Middle East, that are affecting all regions of the Nation." The waiver is effective May 1, 2024. EPA states "[i]t is the Agency's intention to issue new waivers effectively extending (renewing) this waiver until such time as the extreme and unusual fuel supply circumstances described in this action are no longer present."

Some Members of Congress and legislative proposals (e.g., S. 2707) have called for permanent year-round sale of E15. As Congress considers this issue, some states have undertaken a measure allotted to them under the CAA to achieve the same result. In April 2022, eight states petitioned EPA for a permanent waiver to sell E15 year-round (see 42 U.S.C. §7545(h)(5)). In February 2024, EPA issued a final rule to approve the permanent waiver for those eight states, effective April 28, 2025. One fuel industry trade group asserts that the 2025 effective date would be "problematic" and "there must be a reasonable transition to producing summer gas according to a different specification." One biofuel industry trade group appears satisfied with the final rule. In the interim, some have requested that the Biden Administration issue temporary emergency fuel waivers for the 2024 summer driving season. Some Members of Congress have made the same request. One fuel industry group reportedly argues that Congress should take action on a national level to supersede state petitions and regional requirements. Alternatively, Congress could monitor the implementation of the final rule before taking action, if any.

Clean Air Act RVP Requirements

The CAA authorizes the EPA Administrator to regulate fuels and fuel additives. Among other pollutants, the CAA regulates precursors for ground-level ozone (a primary component of "smog"), which negatively impacts human health and welfare among other environmental effects. One of the requirements intended to reduce smog is a limit on gasoline volatility because volatile organic compounds within gasoline

Congressional Research Service

https://crsreports.congress.gov

IN10979

evaporate more readily at higher temperatures (i.e., during the summer months) and can contribute to smog formation. RVP is a common metric of volatility; the lower the RVP, the less the substance will evaporate. 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 an RVP greater than 9 pounds per square inch (psi) during the high ozone season (i.e., the summer months). The National Renewable Energy Laboratory (NREL) has reported that the addition of 10% ethanol to gasoline increases the RVP of the blend by about 1 psi.

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 certain 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 waiver does not apply to reformulated gasoline (RFG); there is a 7.4 psi RVP standard for RFG. EPA reports about 25% of gasoline sold in the United States is RFG. EPA also reports the waiver "does not apply in areas where EPA has approved a regulation into a state implementation plan (SIP) that limits the applicability of the 1.0 psi allowance." The regulations for gasoline RVP standards are available at 40 C.F.R. §1090.215.

Congressional Issues

The sale of E15 has been a long-standing issue for Congress (see for example H.Amdt.156 to H.R. 1 in the 112th Congress). Over the last few years, discussion has focused on the *year-round sale* of E15. NREL reported in 2012 that "the RVP impact of 15% ethanol is indistinguishable from that of 10% ethanol in gasoline for all volatility seasons and base hydrocarbon vapor pressures" and "there is no technical reason for treating E10 differently from E15...." However, the issue of selling E15 year-round involves other aspects that Congress may consider, including:

- How much consumer demand is there for E15?
- Who pays to install E15 fueling infrastructure (e.g., blender pumps)? In a 2022 report, the
 U.S. Department of Agriculture (USDA) discussed the market conditions as well as some
 of the challenges and opportunities for E15. There are federal and state programs that
 support E15 infrastructure.
- What impact might the additional sales of E15 have on the Renewable Fuel Standard (RFS) program? Some researchers examined this relationship in 2017 and 2018.
- Will the additional use of ethanol for E15 raise environmental concerns? In 2019, some environmental organizations requested that EPA "limit the sale and use of E15 in a manner that better protects our health and environment."
- Will California's nonuse of E15 affect E15 demand? California has not approved the use of E15 in its state. In 2022, the California Air Resources Board (CARB) released an E15 evaluation status update.

This CRS product highlights some details of the year-round sale of E15 debate. The product is not a comprehensive analysis of the issue, and should not be interpreted as such. Congressional staff are encouraged to contact CRS if they have any questions.

Author Information

Kelsi Bracmort Specialist in Natural Resources and Energy Policy

Disclaimer

This document was prepared by the Congressional Research Service (CRS). CRS serves as nonpartisan shared staff to congressional committees and Members of Congress. It operates solely at the behest of and under the direction of Congress. Information in a CRS Report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to Members of Congress in connection with CRS's institutional role. CRS Reports, as a work of the United States Government, are not subject to copyright protection in the United States. Any CRS Report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS Report may include copyrighted images or material from a third party, you may need to obtain the permission of the copyright holder if you wish to copy or otherwise use copyrighted material.