

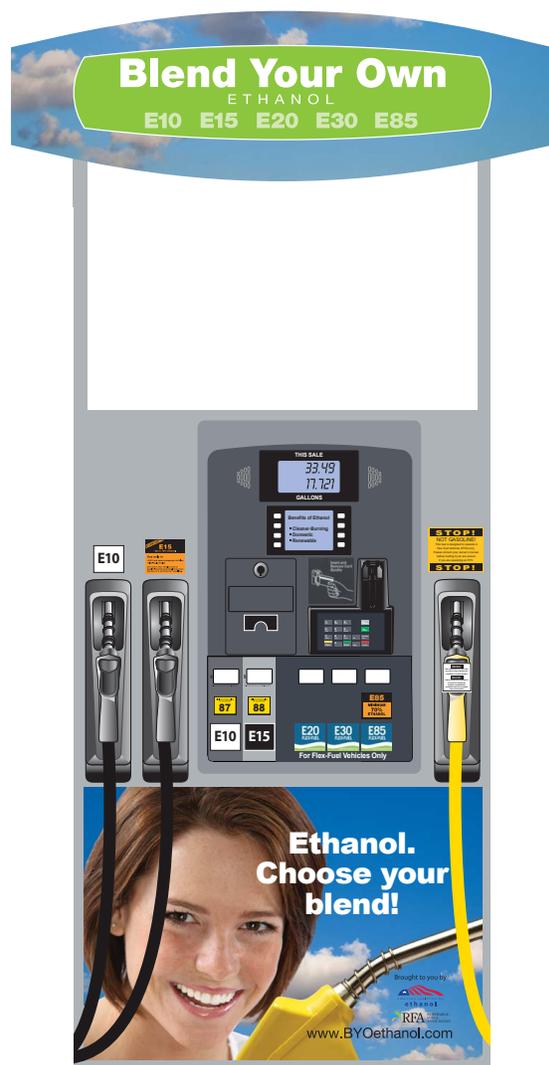
Addendum: E15 Retail Advisory (Updated 01/2013)

The U.S. Environmental Protection Agency (EPA) has approved the use of E15¹ fuels in light-duty vehicles built since model year (MY) 2001 and all flexible-fuel vehicles. EPA has specifically excluded light-duty vehicles built before 2001, as well as non-road, marine, motorcycles, and other small engines. EPA has notified the Renewable Fuels Association of a concern that it has regarding retail dispensing that this advisory is intended to address. The Renewable Fuels Association (RFA) has developed this E15 Retail Advisory as an addendum to be used in conjunction with the RFA's E15 Retailer Handbook, which is referenced in the RFA Model E15 Misfueling Mitigation Plan (MMP), to address specific concerns of EPA.

Retail Fuel Dispensing Strategy

Specifically, EPA has concerns regarding the dispensing of E15 from the same nozzle and hose as other gasoline-ethanol (E0 - E85) fuel blends. EPA's concern involves a customer

dispensing a lower-level ethanol blend after the previous customer dispensed a relatively higher-level ethanol blend from a dispenser with a common hose/nozzle for delivery. For example, a customer dispenses E10 after the previous customer dispensed E15. Using historically accepted dispensing protocols, this customer could receive a fuel blend with a greater concentration of ethanol than desired when purchasing from a dispenser with a single dispensing hose and nozzle, as is the case today for E0/E10 hoses. There are several ways that retailers can address the EPA concerns depending on the configuration of the fuel dispenser. In some cases one approach may be sufficient, while in others, a combination of approaches may be most effective. Approaches include labeling and new dispensing strategies that assure new fuels (like E15) are delivered with appropriate ethanol concentrations only into approved vehicle engines. A review of the entire fuel dispensing system can ensure a successful offering of new fuel blends.



1. E15 includes any fuel containing more than 10 volume % ethanol up to 15 volume % ethanol.

with safeguards in place to ensure blend targets are consistently met. When blending multiple fuels together, one should consider the ultimate fuel blend target and how to reach that target with the quality and composition of the fuels available. Selecting a dual or multiple hose blender pump configuration provides an avenue to ensure dispensing of consistent ethanol concentrations, including compensating for the volume that remains in the fuel dispensing hose after each fueling transaction in the case of nozzles that dispense more than one ethanol blend. The hose residual volume in most cases is typically less than 0.3 gallons.

Below are the RFA recommended strategies to mitigate this EPA concern:

- **Configuration 1 (Dedicated E15 Hose):** For a dedicated E15 dispenser or a dedicated E15 hose at a multiple fuel dispenser, nothing further is required.
- **Configuration 2A (Common Hose: E15 and Gasolines):** For a common hose dispensing both E10 and E15, EPA's concern is addressed by:
 - Providing at least one fueling position offering gasoline containing no more than 10% from a dedicated hose/nozzle. The retailer will post clear and visible signage of the non-E15 fuel's availability.
 - Affixing a label on the E15 dispenser that reads "Passenger Vehicles Only. Use in Other Vehicle Engines and Equipment May Violate Federal Law" consistent with applicable regulations.
- **Configuration 3 (Common Hose: E15 and Flex-Fuels):** For a common hose dispensing multiple fuels that include E15 and higher ethanol blends, EPA's concern may be addressed by requiring minimum transaction volumes with labeling and, in some cases, adjusting the ethanol content of the fuels being blended. The minimum transaction volume or necessary ethanol concentration adjustment will depend on the particular configuration of the blend pump, fuel storage system, available blendstock, and other factors. For example, for hoses dispensing E15 and higher blend levels (e.g., E85) adjustment of ethanol content of the fuels being blended may be needed to compensate for the higher ethanol content of the residual fuel in the hose. In general, the blended fuel's contents can be adjusted to compensate for the varying concentrations of ethanol and gasoline in fuel blends. Technological approaches for eliminating or reducing the amount of residual fuel may also become available. A retailer considering dispensing E15 from the same hose as higher ethanol blends needs to work with EPA to determine what is appropriate based on the particular pump and blending configuration for approval of a MMP.



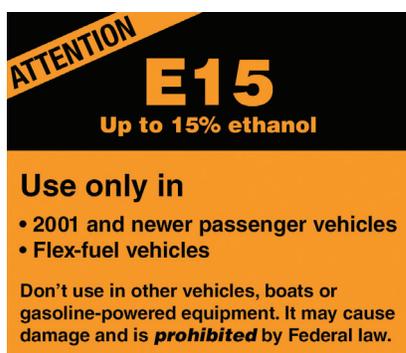
Retailers may also determine that fewer or different measures are appropriate, and always remain free in their submissions to EPA to propose appropriate measures for their facilities. The EPA Fuels Support team can be contacted via phone at (202) 343-9755 or via email at EPAFuelsPrograms@epa.gov. More information can be found at: www.epa.gov/otaq/regs/fuels/additive/e15/e15-mmp.htm.

A strategy for handling the variability in ethanol and gasoline content in fuels being delivered to the retail storage tanks should be developed to complement the design and implementation of the physical blending mechanism that will be used. Fuel blending can occur at the terminal or retail location, or both. If the gasoline available for blending already

contains 10% ethanol content, that volume must be accounted for in the final targeted blend. It's important to remember that EPA requires that specific ethanol content language appear on product transfer documents.

Retail Fuel Dispenser Labeling

Federal and state motor fuel labeling and posting requirements are designed to protect and provide consumers with important information pertaining to the fuel's characteristics. A review of these requirements is highly recommended prior to new retail fuel offering. Specific to E15 fuel dispenser labeling, EPA requires reasonable measures be taken to ensure that any retail fuel pump dispenser that is dispensing a gasoline with greater than 10 volume percent ethanol and no more than 15 volume percent ethanol is clearly labeled (40CFR §80.1501). The label must be conspicuous and legible; EPA has required use of this label unless it approves an alternative label suggested by the retailer.



RFA is making the EPA's E15 label available, free of charge, for an introductory period for any fuel retailer that chooses to market E15. Please contact the RFA at (402) 391-1930.

RFA recommends prominent display of the EPA mandated label for E15 next to the fuel selection button or nozzle hanger; EPA requires the label be placed on the upper 2/3 of the dispenser where consumers will see the label and in a prominent position that makes clear which nozzle or button is dispensing E15.

Following labeling requirements and providing a consistent quality fuel is critical to a successful program. The Federal Trade Commission, as listed in the Code of Federal Regulations Title 16, Part 306, defines the requirements for automotive fuel rating, certification and posting. Some state regulations require additional labeling and posting of fuels. Additionally, some states may adopt the fuel regulations in NIST Handbook 130, Uniform Regulations, which provides specific guidance in section G. Uniform Engine Fuels, Petroleum Products, and Automotive Lubricants Regulation.

The RFA publishes numerous technical guidelines, including the E15 Retailer Handbook that is designed to provide fuel retailers with regulatory and technical guidance in order to legally store and sell E15 ethanol blends. The Handbook provides sample checklists and questions that all potential E15 retailers should contemplate before moving forward with offering E15.

This information and more are available on RFA's website: www.EthanolRFA.org.