

By the Book: How to Offer E15

In 2012, the U.S. Environmental Protection Agency (EPA) approved the use of E15 fuels in 2001 and later model year vehicles and all flex-fuel vehicles (FFVs). EPA has specifically excluded light-duty vehicles built before 2001, as well as non-road, marine, motorcycles, and other small engines. E15 has been available in the marketplace since July 2012, and is now found at thousands of stations across the country.

Retail Fuel Dispensing Strategy

There is growing confusion among fuel equipment providers and retailers on how E15 can be sold. EPA addressed these issues in 2012, and that guidance was included in RFA's E15 Retailer Handbook and updated within the Retail Advisory portion of that handbook in 2013. The reason E15 has specific ways it can legally be dispensed is to eliminate misfueling, such as a customer fueling up on a lower-level ethanol blend, such as E10, after the previous customer purchased a relatively higher-level ethanol blend, such as E15, from a dispenser with a common hose/nozzle for delivery. 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 three ways that retailers can address misfueling, but each depends 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 ensure 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.

Multiple product dispensers, also known as Blender Pumps, have the ability to combine multiple fuel streams at the dispenser in preprogrammed ratios, providing much needed flexibility to station owners with limited fuel storage. These dispensers are designed to deliver a pre-set ratio of ethanol and gasoline 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 0.17 gallons, but must be considered if using a combined hose configuration with E0/E10.

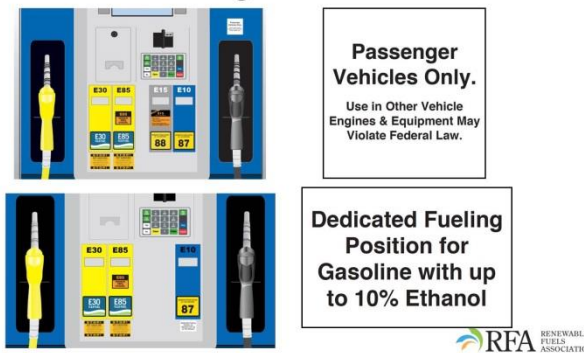
Below are the only three hose configurations that allow E15 to be legally sold today to 2001 and newer vehicles, along with all FFVs:

- **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 E0/E10 and E15, 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.

**EPA Regulating Dispenser Configuration:
Dedicated E15 Hose – Configuration 1**



**EPA Regulating Dispenser Configuration:
Common Hose w/ Dedicated Fueling Position –
Configuration 2A**



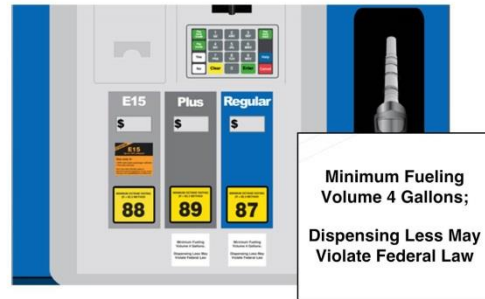
- **Configuration 2b** (Common Hose: E15 and Gasolines): For a common hose dispensing both E0/E10 and E15, EPA's concern is addressed by:
 - Requiring a minimum transaction volume and prominent display of a label communicating that requirement next to the fuel selection button or nozzle hanger, consistent with applicable regulations.

- In this case, a retailer would need to require a 4-gallon minimum transaction volume and post a label stating “Minimum Fueling Volume 4 Gallons; Dispensing Less May Violate Federal Law” or alternative wording approved by EPA.

- Configuration 3 (Common Hose: E15 and Flex-Fuels – like E20, E30 &

E85): EPA has **NOT** approved an approach that would address the concern with this configuration. Retailers considering dispensing E15 from the same hose as higher ethanol blends need to work with EPA to determine what is appropriate based on the particular pump and blending configuration for approval of a Misfueling Mitigation Plan (MMP). Again, this configuration option is NOT approved today and should not be considered when ordering equipment.

EPA Regulating Dispenser Configuration: Common Hose: 4-gallon Minimum – Configuration 2B



Retailers may also determine that fewer or different measures are appropriate and should work with EPA on those efforts, but need to do so before offering E15 to consumers. 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.

Retail Fueling Equipment

When ordering conversion kits for existing dispensers, or ordering new dispensers, it is extremely important that marketers and stations owners effectively communicate to their suppliers that they want to offer E15 to 2001 and newer vehicles. The equipment **MUST** meet one of the above hose configuration options (Configuration 1, 2A or 2B; Configuration 3 is **NOT** currently an option) approved by EPA. Should a retailer order and/or receive equipment that has E15 and a higher level blend of ethanol in the same hose, the retailer will not be able to offer E15 to 2001 and newer vehicles, and may not be eligible for grant funding from such programs as USDA’s Biofuels Infrastructure Partnership (BIP) Program. The most effective approach is to ensure E15 will be dispensed from a separate hose. If that is not possible, make sure that it is on the same hose as E0 and/or E10 and follows the above guidance in Configuration 2A or 2B.

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 the following label, which is available at no cost from the RFA.

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 two-thirds 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.

Why Important?

There are two main reasons that retailers should be certain that they are following the letter of the law when offering E15:

- E10 and E15 are both tested by the EPA through an independent contractor. This contractor tests the fuels for both ethanol and RVP content, and takes a picture of the dispenser to ensure proper label placement. If any of these three are found to be in noncompliance, a Possible NonCompliance (PNC) is issued and must be addressed. If the PNC is not addressed, or perhaps ignored, the EPA's Office of Enforcement is alerted for action.
- If the wrong equipment is ordered and installed, and the retailer cannot offer E15 to 2001 and newer vehicles legally, the retailer may not be eligible for reimbursement

from various funding opportunities at the Federal, state and/or local level. Unless otherwise stated, each of these require E15 to be sold to 2001 and newer vehicles and done legally. The same is true of all other potential ethanol blends; they must be offered legally and in a way to protect consumers.

Conclusion

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.

Should you have additional questions, please contact Cassie Mullen at cmullen@ethanolrfa.org or Robert White at rwhite@ethanolrfa.org.