

State of Colorado



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State Fleet Management statement on Ethanol use in State-owned vehicles

Summary:

State Fleet Management supports the use of ethanol (E85) fuel in State-owned vehicles. A reasonable distance to consider for procurement of E85 fuel is five miles beyond the route of state travel. A reasonable price difference to consider for procurement of E85 fuel is 10 cents per gallon.

What is E85?

E85 is the term for motor fuel blends of 85 percent ethanol and 15 percent gasoline. Ethanol can be made from corn, switch grass, cheese-by products, and other cellular compounds. E85 is an alternative fuel as defined by the U.S. Department of Energy; those vehicles which can use E85 are known as Flex Fueled Vehicles (FFV). With more than 50 different model types, there are between 4 million and 6 million FFVs on the road today. E85 has a 105 octane rating and provides a boost in the engine performance, which is especially important when operating in high altitude areas. It burns cooler than gasoline and keeps the engine cleaner for the life of the vehicle.

Besides its superior performance characteristics, ethanol burns cleaner than gasoline; it is a completely renewable, domestic, environmentally friendly fuel that enhances the nation's economy and energy independence.

Today, the U. S. imports more than half of its oil and overall consumption continues to increase. By supporting ethanol production and use, U.S. drivers can help reverse that trend. Ethanol is also being produced in Colorado from corn, creating more jobs in not only the production of Ethanol, but in the industries of agriculture, transportation, and distribution. Ethanol production facilities also help increase local city tax bases, increasing the stimuli to the local and state economy.

What are Flexible Fuel Vehicles (FFV)?

Flexible Fuel Vehicles are specially designed to run on any ethanol fuel blend up to 85 percent ethanol. E85 has a high octane rating of over 100, compared to 87 for gasoline. Further, on-board equipment in the vehicle reads the fuel blend, allowing drivers to fuel with E85 or gasoline if E85 is not available. These models have been manufactured since 1992 to meet the requirements that federal and state fleets, as well as alternative fuel providers, purchase FFV's. However, many FFV drivers don't know about their vehicles' alternative fuel capability.

Background

For many years energy has been taken for granted, with reliance upon nonrenewable petroleum, natural gas, coal, and other fossil-based fuel reserves as a predominant source for transportation, power, and home heating needs. Recent market conditions and energy security concerns have created awareness and demand for non-polluting, domestically produced, renewable resources to supplement our reliance upon petroleum fuels.

Federal ethanol policy began with the Energy Tax Act of 1978 which created a \$0.04/gallon tax exemption on all gasoline containing at least 10 percent ethanol (E10) (equivalent to \$0.40/gallon of ethanol and fluctuating between \$0.40 and \$0.60 per gallon of ethanol since its inception). Following the oil embargos of the 1970s, Congress passed the Energy Security Act of 1979, which included a volumetric ethanol excise tax credit (VEETC). This credit reduced the federal excise tax by 5.2 cents per gallon for E10. Other blends were also eligible and received 52 cents for every gallon of ethanol used. More recently, the American Jobs Creation Act of 2004 (Public Law 108-357) and the Energy Policy Act of 2005 have included a number of ethanol policies. The rationale for these policies have varied somewhat over the years as ethanol was initially viewed as a means to increase corn demand, as an environmentally friendly renewable fuel (Clean Air Act, 1990), and recently as a means to reduce imported oil from volatile regions of the world.

Benefits of using E85

- Reduces Carbon Dioxide (CO₂) (primary greenhouse gas contributing to global warming)
- E85 fuel is made domestically, reducing our dependence on foreign oil.
- E85 fuel use keeps our fuel dollars at home, reducing the trade deficit and creating jobs.
- E85 use qualifies for government-mandated regulations of fleet vehicle emissions.
- E85 is considered a "Bridge" technology that will bridge us to the cellulosic production of biofuel, and then the ultimate goal of hydrogen powered vehicles.

Many major U.S. cities suffer from unhealthy levels of smog (ground-level ozone); E85 may be able to help. The U.S. Environmental Protection Agency tests have shown that E85 vehicles reduce harmful hydrocarbon and benzene emissions when compared to vehicles running on gasoline. The production and use of E85 may reduce greenhouse gases such as carbon dioxide by approximately 30 percent. Further, the use of high-blend ethanol fuels such as E85 can reduce harmful exhaust emissions such as carbon monoxide (-40%) and smog-forming pollutants (-15%).

E85 is environment-friendly. It has the highest oxygen content of any fuel available today, allowing it to burn more completely (cleaner) than conventional gasoline. Although CO₂ is released during ethanol production and combustion, it is recaptured as a nutrient to the crops that are used in its production. Unlike fossil fuel combustion, which unlocks carbon that has been stored for millions of years, the use of ethanol results in low increases to the carbon cycle.

Other Policy:

SB-03-091 Section 4 (II) states, "Adopt a policy that at least ten percent of all state-owned bi-fueled vehicles should be fueled exclusively with an alternative fuel. To encourage compliance with this policy for one or more state fiscal years commencing before July, 1 2010, the rules promulgated pursuant to this paragraph (c) may establish progressively more stringent percentage milepost."

The Greening Government Executive Orders D011 07 and D012 07 require state government to reduce petroleum consumption by 25% by June 30, 2012 from baseline SFY 2005-06. Therefore, FFV's need to be refueled at least 50% of the time with E85 fuel. Using a blend of E85 ethanol in state owned FFV vehicles will benefit the state by reducing petroleum consumption by eighty five percent per gallon, as compared to regular unleaded petroleum fuel.

Additional Information:

The biofuels refueling sites are posted to the SFM website:
<http://www.colorado.gov/dpa/dcs/fleet/index.htm>

There are approximately 12- biofuels refueling sites in the state, but approximately 20 of those are very new and have not been added to the EERE-NREL station locator:
<http://www.afdc.energy.gov/afdc/>

For mobile PDA access:
<http://www.afdc.energy.gov/afdc/locator/m/station/>

SFM updated list of biofuel stations can be found at:
<http://www.colorado.gov/cs/Satellite/DPA-DCS/PA/1200535985059>

The fuel type purchases are monitored by Department, Division, and Section at the My Cars website. Directions for accessing the My Cars web site go to:
<http://www.colorado.gov/cs/Satellite/DPA-DCS/PA/1199264707392>