Ethanol: Points to Consider Relative to Fuel Tax Administration (2007)

Introduction

Ethanol as defined by the FTA Motor Fuel Tax Section Uniformity Committee is “a colorless, odorless liquid, produced synthetically by cracking the ethane (using ethane from natural gas or naphtha from crude oil) fermentation from crop biomass such as sugar and corn and from waste products such as household waste and paper mill sludge through chemical decomposition and fermentation. Also known as Ethyl-Alcohol or Alcohol.”

"Fuel grade ethanol" or “denatured ethanol” is ethanol that has been blended with at least 2% gasoline per the US Tax and Trade Bureau to render the product unsuitable for human consumption. This product must meet the American Society for Testing and Materials standard in effect January 1, 1995, and successor rules, as the D-4806 specification for denatured fuel grade ethanol for further blending with gasoline for use as automatic spark-ignition engine fuel commonly known as gasohol.

Gasohol as defined by the FTA Motor Fuel Tax Section Uniformity Committee is “an accountable product resulting from a blend of gasoline and ethanol”.

Gasohol is commonly referred to as E10 or E85 where the E refers to Ethanol and the numerical value refers to the percentage of ethanol in the blend. E10 is comprised of 10% ethanol and 90% gasoline; E85 is comprised of 85% ethanol and 15% gasoline. E10 can be used to fuel any gasoline powered vehicle, but E85 can only be used in a “flex fuel vehicle” due to the increased level of ethanol in the blend.

Supply and Demand

According to the United States Department of Energy, the number of ethanol plants more than doubled and production capacity tripled in the United States between 2000 and 2007. Currently, ethanol is primarily produced from corn in the United States and from sugar cane in South America. Research is underway to develop additional feedstocks for ethanol, such as woodstocks, switchgrass, and agricultural waste.

The demand for ethanol in the United States has dramatically increased over the last few years. Ethanol is now used as an oxygenating additive for gasoline, increasing octane levels and reducing emissions, creating reformulated gasoline (RFG). RFG use is required in highly populated metropolitan areas of the US. The increase in the cost of gasoline and the nation-wide desire to decrease the US dependency on foreign oil has also had a positive effect on demand.

Licensing Issues

Fuel grade ethanol or denatured ethanol is statutorily defined as a taxable motor fuel in some jurisdictions and taxed in the same manner as gasoline. A manufacturer or producer license is required, and a monthly return must be filed in order to remit fuel tax on the amount of ethanol that is produced within the jurisdiction or imported into the jurisdiction. Allowances are provided for tax exempt sales.

In the majority of jurisdictions, fuel grade ethanol or denatured ethanol is not defined as a taxable motor fuel until it is blended with gasoline for use in a motor vehicle, and only then is the fuel tax applicable. A blender license is required, and a monthly return must be filed in order to remit fuel tax on the gallons of ethanol that are blended with gasoline during the month. Allowances are provided for tax exempt sales. The FTA Motor Fuel Uniformity Committee has adapted a monthly Fuel Blender's Report which is included in the Uniformity Project's yearly publication.

Tax Evasion Opportunities

It is important to note that ethanol is not distributed through the petroleum bulk transfer system. Ethanol is typically transported via railcar, barge, or transport truck. For this reason, it is difficult for tax administrators to track the movement of this product, the blending of this product with gasoline and the eventual sale or use of the blended product as fuel for a motor vehicle.

The importer or producer of the ethanol may be unaware of the taxable nature of the product or may be unwilling to comply with statutory requirements. Ethanol may be stored above the terminal rack and blended into gasoline as it is moved across the rack. In this case, the bill of lading should indicate the product is gasohol and the appropriate tax should be remitted. The ethanol may be stored below the rack and splash blended with gasoline after it has been loaded into the transport truck. If the fuel tax is not imposed until the blending occurs, and the blender does not report the activity, the tax will not be collected on the ethanol portion of the blend. The challenge rests with the taxing authority to identify, educate, and appropriately license producers, importers, and blenders of ethanol.

Incentives

Several jurisdictions offer incentives to retailers who sell ethanol blends of a specific percentage, such as E85. A reduced fuel tax rate may be applied to an ethanol blend. Incentives are also available in the form of income tax credits for production costs associated with an ethanol production facility. Producers may be offered an incentive based on production levels. The IRS offers a $.51 per gallon refund to ethanol blenders.