The Missouri Renewable Fuel Standard

requires ethanol in most gasoline beginning January 1, 2008.

ARE YOU READY?

TEN THINGS MISSOURI TANK OWNERS AND OPERATORS NEED TO KNOW ABOUT ETHANOL

1. Ethanol is a type of alcohol made usually from corn in Missouri and other states.

2. E10 is a blend of 10% ethanol and 90% unleaded gasoline. E85 is a blend of 75% to 85% fuel ethanol and 25% to 15% unleaded gasoline. Blends between E10 and E85 are not allowed to be sold at retail.

3. Any vehicle or small engine should run fine on E10, but only specially designed vehicles can use E85.

4. You are ***not required*** to label your dispensers disclosing the ethanol content if you are selling ***E10***. However, you ***are required*** to label your dispensers if you are selling ***E85.***

5. The marketer who sells fuel to you is required to notify you what percentage of alcohol is in the fuel—if there is any. This information should be on the invoice or bill of lading provided with each delivery.

6. Ethanol mixes readily with water. If you are not diligent about checking for water in your tanks and removing it, the ethanol in E10 will *find* the water, separate itself from the gasoline, sink to the bottom of the tank, and cause problems with your customers' cars. (***See the checklist on the back of this sheet to avoid this problem.)***

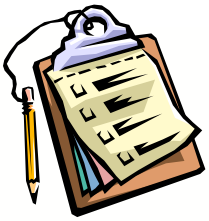
7. You must use a different paste to check E10 or E85 tanks for water. (This is different than the paste used for 100% gasoline.)

8. Since ethanol is a good cleaning agent, it will *clean* dust and small debris from your tanks, piping, and dispensers when you first start using it. Therefore, you may have to change the filters in your dispensers more frequently, at least at first. To minimize filter changes, a thorough inspection and cleaning of tanks should be done prior to introduction of ethanol in storage tanks. **Filters must have pores of 10 microns or less** on dispensers selling E10 or E85. (One micron is recommended for E85.)

9. If your underground tank and piping system is older, some parts – like rubber or plastic gaskets, hoses, connectors, etc., or anything made of aluminum that is not *plated* – may not be compatible with ethanol, especially E85. If you have any questions about equipment compatibility, check with your equipment supplier and/or maintenance expert.

10. When you renew your insurance policy with the PSTIF, be sure to identify tanks that contain E10 or E85 on the renewal application.

For more information, contact the Missouri Department of Agriculture's Fuel Quality Program at (573) 751-2922 or visit www.mda.mo.gov/wm/renewablefuelstandard.htm.



STORE OPERATOR CHECKLIST

INVESTIGATORY/PREPARATORY

- ☐ VERIFY compatibility of tanks, piping, and other equipment, including submersible pumps.
- ☐ INVESTIGATE tank water problems and correct. Review history of water problems and initiate any necessary corrective action.
- ☐ TIGHTEN seals on fill caps and assure proper runoff from manhole covers.
- ☐ REMOVE water bottoms, if present. Check for tilted tanks.
- ☐ CLEAN tank sides and bottom, if necessary.

CONVERSION PLAN (before first delivery)

- ☐ EQUIP dispenser with 10-micron filter. (Remember: *SAFETY FIRST – SHUT OFF BREAKER. ONLY PROPERLY TRAINED PERSONNEL SHOULD CHANGE FILTERS.*)
- ☐ RECHECK for water bottoms and remove, if present.
- ☐ ISSUE alcohol-compatible paste. Discard any old incompatible pastes.
- ☐ CONFIRM any applicable accounting procedures.

FIRST DELIVERY

- ☐ CHECK for water. Water must be removed before first delivery of ethanol blends.
- ☐ FOLLOW normal delivery procedures and ensure that accurate inventory and dispenser readings are taken.
- ☐ VERIFY (with transport driver) correct compartment for correct tank.
- ☐ PUMPS should be shut down during initial delivery (check company policy).
- ☐ PURGE lines from tanks to dispensers (check company policy).
- ☐ CHANGE octane decals, if necessary. Also repaint manhole covers to proper color code (e.g., API color code).
- ☐ FILL tanks to at least 80% capacity. Keep as full as possible for 7 to 10 days.
- ☐ TEST for water at the beginning of each shift for the first 48 hours after initial delivery.
- ☐ CHECK for water daily.
- ☐ NOTIFY designated personnel if water is detected and have it removed at once.
- ☐ REPLACE filters if dispensers are running slow.
- ☐ CHECK the dispenser calibration two weeks after initial delivery.

REMEMBER:

NO AMOUNT OF WATER IN THE TANK IS ACCEPTABLE

(Adapted with permission from Renewable Fuels Association – Publication #960501)