Product Loading Chart with the New ULSD

What can you haul before ULSD without contaminating the ULSD? It will require diligence and a commitment by the drivers to draining dry the compartment before you load ULSD after most products. Some recommend flushing a compartment that has held high sulfur product if you are going to haul ULSD behind high sulfur diesel. As little as one gallon of high sulfur at 5000-ppm sulfur left in a 1450 compartment that is loaded with 15 ppm ULSD will bring the ppm high enough for the ULSD to be off specification. This chart is in color for email newsletter. We will mail a copy to any member firm who receives their newsletter by mail/fax and who requests the color loading sequence chart. It will also be on the website. This is based on calculations by the Arkansas Oil Marketers Assoc. staff and we would encourage you to develop your own chart to meet your needs.

1. Check to see if the right labels are on your pumps and those of your retail customers.
2. Check to see if any of your customers need decals for their tanks or pumps. Make sure that have both the EPA and IRS required decals.
3. Check to see if the paint and markings on your fill pipes and any other items that need API color code markings are up to date. ULSD is a yellow hexagonal background with a black U.
4. Check to see if you have the correct wording on your product transfer documents.

Recommended Petroleum Loading Sequence Chart

Product on Previous Load ↓ ↓	←←←←←←←←←←PRODUCT TO BE LOADED→→→→→→→→→→							
	Gasoline Any Grade	Aviation Gasoline	High Sulfur (Dyed Red)	Low Sulfur (Dyed Red)	Low Sulfur (Undyed)	ULSD (Dyed Red)	ULSD (Undyed)	Lube Oils
Gasoline Any Grade	Empty	Flush Compartment	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Drain Dry	Drain Dry
Aviation Gasoline	Flush Compartment	Empty	Flush Compartment	Flush Compartment	Flush Compartment	Flush Compartment	Flush Compartment	Flush Compartment
High Sulfur (Dyed Red)	Drain Dry	Do not Load Steam Clean	Empty	Drain Dry	Drain Dry	Flush Compartment	Flush Compartment	Drain Dry
Low Sulfur (Dyed Red)	Drain Dry	Do not Load Steam Clean	Empty	Empty	Drain Dry	Drain Dry	Drain Dry	Drain Dry
Low Sulfur (Undyed)	Drain Dry	Do not Load Steam Clean	Empty	Empty	Empty	Drain Dry	Drain Dry	Drain Dry
ULSD (Dyed Red)	Drain Dry	Do not Load Steam Clean	Empty	Empty	Drain Dry	Empty	Drain Dry	Drain Dry
ULSD (Undyed)	Drain Dry	Do not Load Steam Clean	Empty	Empty	Empty	Empty	Empty	Drain Dry
Lube Oils	Do not Load Steam Clean	Do not Load Steam Clean	Do not Load Steam Clean	Do not Load Steam Clean	Do not Load Steam Clean	Do not Load Steam Clean	Do not Load Steam Clean	Empty

Definitions

Empty	Unload product at delivery location leaving the compartment and discharge piping as empty as possible.
Drain Dry	a) Unload product as in "Empty" at delivery location as above.
	b) Open trailer's internal valve and gravity drain to metal bucket or pump off all remaining product.
Flush Compartment	a) Unload product as in "Drain Dry" as above.
	b) Flush each compartment with 10 gallons (may require more depending upon the length of piping on truck) of the next product to be loaded, and empty through discharge piping to metal bucket or pump off.
	c) PTO piping if not of Drain Dry design must be Flushed if last product was a higher sulfur product or incompatible with new product.
Do Not Load	Do not load the next product until all affected compartments, piping, meters and hoses are cleaned thoroughly (I.e. steam cleaning).