



**Q: How will customers know if they are buying ULSD?**

**A:** The ULSD regulations require retail pumps and bulk tanks to be clearly labeled with the specific type of diesel fuel.

**Q: May I continue to blend No. 1 diesel or Kerosene to improve ULSD cold weather performance?**

**A:** Yes, but the No. 1 Diesel or Kerosene must be ultra-low sulfur. (Please note that Kerosene may not contain the necessary lubricity additives.) EPA regulations prohibit the blending of fuels or use of additives that will contaminate ULSD.

**Q: Will ULSD affect the power and fuel economy of equipment?**

**A:** Under typical operating conditions there should be no noticeable impact on the overall power of the vehicle. The reduction in energy content in ULSD could result in reduced fuel economy by some estimates of about 1%, which is within normal variability of diesel fuel.

**Q: Can LSD be burned without operational problems in 2007 model year and later diesel vehicles?**

**A:** No. EPA regulations prohibit the use of LSD in highway diesel vehicles beginning with the 2007 model year. The emission control systems could experience significant reductions in efficiency and durability if operated on LSD which could invalidate the manufacturer's warranty.

**Q: Because the process of removing sulfur from diesel tends to reduce lubricity, is anything being done to address this concern?**

**A:** Yes. The American Society for Testing and Materials (ASTM) adopted a new lubricity specification, ASTM D975, for all diesel fuels. If a fuel lacks sufficient lubricity, suppliers will be adding lubricity additives at the pipeline terminal.

Van Manen Petroleum Group is providing this information as a courtesy to its customers and colleagues. Please contact your Fuel and Lubricant Consultant with any additional questions or for immediate assistance call 616-453-6344 or toll free 800-654-4244.

The following resources are also available:

[www.epa.gov/cleandiesel/](http://www.epa.gov/cleandiesel/)  
[www.epa.gov/cleandiesel/presentations/](http://www.epa.gov/cleandiesel/presentations/)  
[www.ecdiesel.com](http://www.ecdiesel.com)



**Q: What is Ultra-Low Sulfur Diesel?**

**A:** Ultra-Low Sulfur Diesel (ULSD) is a clean burning fuel that has a maximum sulfur content of 15 ppm. It will eventually replace the current highway diesel fuel, Low Sulfur Diesel (LSD), which can have as much as 500 ppm. ULSD is required for use in model year 2007 vehicles equipped with advance emission control systems. ULSD will generally look lighter in color and have less smell than other diesel fuel.

**Q: Why is ULSD being required for on-highway use?**

**A:** To reduce emissions from diesel vehicles and equipment, 2007 diesel engines will have advanced emissions control systems that cannot tolerate sulfur levels currently allowed with LSD.

**Q: When will the ULSD requirement take effect?**

**A:** Refiners must ensure that at least 80% of the volume of highway-diesel fuel they produce or import is ULSD-compliant on June 1st, 2006. ULSD requirements for parties downstream, including terminals, take effect on September 1st, 2006. Retail outlets and fleet fueling facilities must be compliant by October 15th, 2006. From June 1st, 2006 to December 1st, 2010 both ULSD and LSD will coexist in the marketplace. Beginning on December 1st, 2010, only ULSD will be available at retail for highway use.

**Q: Will ULSD cost significantly more at the pump than LSD?**

**A:** In this market, nobody can predict future prices. However, special handling to minimize contamination during transport and additional process to reduce the sulfur content from 500 ppm to 15 ppm will be needed for ULSD. These activities will influence the cost thus, affecting price.

**Q: Does the industry expect the introduction of ULSD to cause any major supply disruptions?**

**A:** No. Introduction of the new fuel is being phased in gradually to facilitate a smooth transition.

**Q: What are the potential benefits of ULSD?**

**A:** The primary reason for introducing ULSD is to reduce exhaust emissions of particulate matter, hydrocarbons, and nitrogen oxides by more than 90%. The EPA estimates that there will be significant health benefits from stricter emission standards and that these benefits will increase over time.

**Q: Will these requirements extend to off-highway diesel fuel?**

**A:** Yes, the EPA has finalized similarly stringent standards for non-road diesel fuel that will be phased in over several years.

**Q: Do all service stations and truck stops have to sell USDL?**

**A:** No. The EPA USDL regulations do not require service stations or truck stops to sell USDL. However, by December 1st, 2010, if a retail outlet sells highway diesel fuel, it must be USDL. To assure that customers are clear on what fuel is being sold, there are requirements for clearly labeling dispensers to indicate which grade is provided.

**Q: Can customers continue to purchase LSD if they prefer to use it in older vehicles?**

**A:** Yes, where available. ULSD may be used in all diesel vehicles, even those that do not require it.