



Texas Petroleum Marketers  
and Convenience Store Association

www.tpca.org

Important Information - **READ IMMEDIATELY!**

# REGULATORY ALERT

No. 407 Printer Friendly  
October 16, 2006 Version

## Attention Operations

### Questions & Answers Regarding Ultra-Low Sulfur Diesel

#### **Q. Must I supply 15-ppm ULSD by October 15, 2006?**

A. No, you are not **required** to sell 15-ppm on-road ULSD until June 1, 2010. However, nearly all suppliers will have **nothing but** 15-ppm beginning September 1, 2006. Since you will only be able to get 15-ppm on-road ULSD from your supplier, then you must comply with the ULSD requirements.

#### **Q. If I am not required to have ULSD in my tanks by October 15, 2006, what is the significance of the deadline?**

A. October 15, 2006 marks the beginning of the ULSD 20% downgrade limitation. You can only downgrade 20% of the ULSD on-road fuel you sell over a one-year period to 500-ppm on-road fuel. If you turn over your tanks to 15-ppm after the deadline then the amount of ULSD you use to complete the turnover counts against your 20% downgrade limitation.

#### **Q. I don't completely understand downgrading can you summarize it for me?**

A. The downgrading limitation applies on a site per site basis. In other words every retail site and bulk plant site you own are each entitled to a 20% downgrade limit. Downgrades are counted against the site where the downgrading occurs. There is only **one way** to downgrade ULSD; 15-ppm ULSD **on-road** fuel can be downgraded to 500-ppm LSD **on-road** fuel. Everything else must be "re-designated" to **off-road** use. The EPA limits the amount of 15-ppm ULSD that can be downgraded. Petroleum marketers **above the retail level** may only downgrade 20% of the total annual amount of 15-ppm ULSD on-road fuel they supply per year. If you choose not to downgrade the ULSD to 500-ppm on-road LSD, then you must re-designate it for off road use. This can be done at any time without limitation. There are different downgrading limitations **for certain** retailers and wholesale purchaser-consumers (WPC). A retailer or WPC who sells or dispenses **both** 15-ppm ULSD on-road fuel and 500-ppm LSD on-road fuel **at the same location** are exempt from the 20% downgrade limit. These retailers and WPCs may downgrade as much 15-ppm ULSD on-road fuel as they like so long as the fuel remains at the retail or WPC location. Retailers or WPCs that sell or dispense only 15-ppm ULSD on-road diesel fuel are also exempt from the downgrade limitation.

#### **Q. How do I calculate what my 20% ULSD-on-road downgrade volume limitation?**

A. For this year only, the 20% downgrade limit measuring period runs from October 15, 2006 to May 31, 2007. You may downgrade 20% of the ULSD you expect to sell during this period. Beginning next year, the measuring period runs each year from June 1 thorough May 31 of the following year. This requires you to estimate future sales. The EPA does not expect you to hit the nail on the head when forecasting volumes for purposes of calculating the 20% downgrade limit. However, you must be in the "ballpark". Remember, if you run out of downgrading volume you may re-designate the fuel to off-road use without limitation.

#### **Q. What are the procedures for downgrading?**

*A. Downgrading procedures are simple. Once you decide to downgrade 15-ppm on-road ULSD to 500-ppm on-road LSD you must create a new product transfer document (PTD) that accompanies the fuel. The new PTD must include the appropriate product description language required for 500-ppm LSD. Maintain a copy of the old 15-ppm PTD and the new 500-ppm PTD, together in your records. If the downgrade occurs in a tank where there is a dispenser, make sure that the product label required on the dispenser is changed from the 15-ppm label to a 500-ppm label. The same procedures should be followed when 15-ppm or 500-ppm on road fuel is re-designated to off-road use. Change the PTDs, save copies of both for your records and switch dispenser labels to match the re-designated fuel.*

**Q. Are there any exceptions to the downgrade limit?**

*A. Yes. The downgrade limit does not apply (meaning you can downgrade as much 15-ppm on-road ULSD to 500-ppm on-road LSD) if you are a retailer and sell both 15-ppm and 500-ppm fuel at the same location. The same is true if for wholesale purchaser-consumers. The downgrade exception is not available to bulk plant operators or petroleum transporters.*

**Q. Is there any other way, to deal with 15-ppm on-road ULSD that exceeds the required sulfur limit other than to downgrade it to 500-ppm on-road fuel?**

*A. Yes. If you don't downgrade the fuel, you may "re-designate" it to **off-road** use. In other words, you can take 15-ppm on-road diesel fuel and/or 500-ppm on-road diesel and re-name it as an **off-road fuel**. To re-designate the fuel from on-road to off-road, simply create a new shipping paper for the re-designated fuel, staple the new shipping paper to the old on-road diesel fuel shipping paper and file them both in your records for a minimum of five years.*

**Q. Is there any limit to the amount of on-road diesel fuel that I can re-designate to off-road use?**

*A. No, there is no limit to the amount of on-road diesel that can be re-designated to off-road diesel for any party below the terminal rack. However, you may be limited in the amount of on-road fuel you may re-designate to off-road use due to market demand. Another limitation to re-designation is your ability to file a credit or refund for the federal tax paid on the on-road diesel once it is re-designated to a non-taxable off-road use. If you have an IRS ultimate vendor number you may file for a credit or refund if the fuel is sold to a state or local government but not on fuel sold to a farmer. Also, keep in mind that you are not allowed by the IRS to splash blend red dye below the terminal rack.*

**Q. How do I turnover my tanks to 15-ppm on road diesel fuel.**

*A. Five deliveries of 15-ppm dropped into a 500-ppm tank should successfully turn the tank over to 15-ppm product. See the chart below for turnover guidance. Three deliveries of 15-ppm may turnover tanks with low volumes of 500-ppm. You may choose to test the tank for sulfur content to ensure it has been turned over to 15-ppm diesel, but you are not required to do so.*

**TURNING TANKS OVER TO ULSD**

In order to make certain storage tanks are in compliance with ULSD requirements, active management of diesel fuel inventories and deliveries is essential as the October 15th compliance deadline draws near. Manage tank turnover by using a mixture of three parts delivery volume of ULSD to one part existing tank inventory. A turnover can be achieved by making a minimum of five "three-to-one deliveries" into each tank.

**Three to One Inventory Management**

	STARTING INVENTORY		DELIVERY		ENDING INVENTORY	
	Gallons	Sulfur ppm	Gallons	Sulfur ppm	Gallons	Sulfur ppm
Delivery # 1	1000	500	3000	15	4000	136

Delivery # 2	1200	136	3800	15	4800	46
Delivery # 3	800	45	2400	15	3200	33
Delivery # 4	1050	23	3150	15	4200	17
Delivery # 5	700	17	2100	15	2800	15

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*Receive five three-to-one ULSD deliveries then change dispenser labels to ULSD 15-ppm.*

*Jobbers should not receive deliveries less than “three-to-one” because doing so will result in insufficient mixing of delivery and heel. Good mixing is required for proper tank turning.*

*Tanks turned in less than three deliveries will require testing for compliance.*

*You may want to test all tanks to determine if turnover has been achieved, regardless of the turnover formula used.*

**Q. How do I know if my tanks are turned over to 15-ppm?**

*A. The three-to-one inventory formula turns tanks over completely if followed properly. Many petroleum marketers have reported that after following the three-to-one procedures their tanks have tested in the single digit ppm range for sulfur content. The turnovers were completed without cleaning the tanks. If you are not comfortable relying on the three-to-one approach, you must perform a test on the tank after you determine that turnover is complete.*

**Q. I supply only 15-ppm to my customers. Many of them are small “Mom and Pops”. They intend to keep the 500-ppm labels on their dispensers even after the tanks are likely turned over. Can they do this?**

*A. Not permanently. After October 15, 2006 any 15-ppm ULSD placed in a tank attached to a dispenser with a 500-ppm label is considered downgraded. This is true even if the tank is fully turned over to 15-ppm. Once the tank owner surpasses its 20% downgrade limitation, they will be in violation of the ULSD regulations.*

**Q. If I deliver 15-ppm to a tank where the owner does not change the 500-ppm label, does it count against my 20% downgrade limitation?**

*A. No. The retailer is doing the downgrading. You as the wholesaler received the fuel as 15-ppm and delivered it as 15-ppm. The retailer is receiving 15-ppm and is then selling that fuel as 500. It is recommended that you tell your customers in writing that you will only be supplying them with 15-ppm.*

**Q. Some of my customers are very small and if they keep 500-ppm labels on their dispensers and receive 15-ppm fuel, eventually they will use up their 20% downgrade limitation. I don’t want to see my customers get into trouble with the EPA. Is there anything I can do?**

*A. Yes. If your customer is about to reach their downgrade limit you may downgrade the 15-ppm to 500-ppm while the fuel is in your custody. You can downgrade the 15-ppm by simply changing the shipping paper to say it is 500-ppm. As a result, the retailer is receiving 500-ppm and selling 500-ppm and is therefore not the downgrading party. You are the downgrading party and the amount of fuel changed from 15-ppm to 500-ppm will count against your downgrade limitation.*

**Q. When should I change my dispenser labels?**

*A. As soon as you are certain that you tanks are turned over. Also you must change your dispenser labels any time your the product in your tank flips back to 500-ppm. This could occur because of a mis-delivery, or supply shortage of 15-ppm.*

**Q. Can't I just keep the 500-ppm label on my dispensers even after the tank is turned over to 15-ppm?**

*A. You may temporarily, but it is not advisable for the long term because all 15-ppm fuel that you sell as 500-ppm will count against your 20% downgrade limitation. If you do this, you will likely use up all your downgrade allowance in just a few months.*

**Q. Must I test for sulfur content?**

*A. Under the new ULSD diesel regulations testing is not required for any party downstream of the refinery gate. However, petroleum marketers who distribute fuel to retail outlets as well as wholesale purchaser-consumers must conduct sampling and testing in order to raise a defense against a violation of the sulfur limits. If you don't test and then you can't argue with the EPA about liability.*

**Q. If I decide to test, how often must I do it?**

*A. The regulations do not say how often sampling and testing must occur, though it is certain that testing every batch of ULSD or LSD is not required. The EPA refuses to attach a number to testing frequency. Periodic random testing, perhaps once per month or even once per quarter may be sufficient. Testing should definitely be done if there is any question that the fuel has been contaminated.*

**Q. How do I test?**

*A. There is no field test available. Samples kits must be collected and sent to a laboratory for testing. Most laboratories provide sample kits and mailing packages. Tests can be done for as little as \$50.*

**Q. Where can I find a testing laboratory.****A. ULSD Testing Service for TPCA Members**

Southwest Research Institute® (SwRI®) will provide Texas Petroleum Marketers & Convenience Store Association members with ULSD Sulfur Kits and EPA approved ultra-low sulfur diesel (ULSD) fuel testing. Each member is responsible for the purchase of the ULSD sulfur kit and sulfur testing on each sample(s).

**ULSD Sulfur Kits**

Southwest Research Institute provides easy to use DOT approved ULSD Sampling kits for clients requiring the flexibility of sampling and shipping their own diesel fuel samples to Southwest Research Institute for approved ultra-low sulfur testing. Each ULSD

**Sampling kit includes:**

- 4-1 oz sample bottles
- Two (2) – bags containing absorbent pads (Used to contain samples during shipment)
- Two (2) – cable ties to close bags
- 4 – pre-cut strips of tape to wrap around the bottle closure (cap) containing the diesel fuel sample.
- 1 – pre-cut strip of tape used to close the box
- Shipment to requestor/distributor
- Prepaid airbill for the shipment of diesel fuel samples to SwRI via 2-day service.
- Sample labels for requestor to apply to each bottle
- Return address label to SwRI
- Sampling and Shipping instructions

The ULSD sampling kits provided by SwRI meet DOT's requirements (49CFR §173.4) for the shipment of small quantities of diesel fuel. Shippers offering materials, which meet the requirements of §173.4, are not subject to DOT's formal training requirements. Requestors shipping SwRI ULSD Sample kit must follow the shipping instructions supplied with each kit. A person who offers a small quantity shipment of diesel fuel is still responsible for properly classifying and naming the material as well as correctly determining if the material may be shipped as a small quantity.

### Cost of Materials and Services

Southwest Research Institute offers several packages that include the cost of the kit and sulfur testing.

Package 1 - \$160.00

Conduct sulfur testing (ASTM D 7039 or D 5453) on one diesel sample

Package 2 - \$195.00

Conduct sulfur testing (ASTM D 7039 or D 5453) on two diesel samples

Package 3 - \$230.00

Conduct sulfur testing (ASTM D 7039 or D 5453) on three diesel samples

Package 4 - \$265.00

Conduct sulfur testing (ASTM D 7039 or D 5453) on four diesel samples

Cost to purchase the sampling kit or the service to conduct Sulfur testing is listed below:

\$125.00 Kit Only

\$40.00 Sulfur, ASTM D 7039

### Contact Information

Members requiring additional information on ordering ULSD Sampling Kits should contact

Mary Fernandez

Tel: 210-522-3004

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### IMPORTANT THINGS TO REMEMBER ABOUT THE NEW ULSD REGULATIONS

- Downstream contamination is not occurring at the rate initially feared. Successful tank turnover does not require cleaning of the tank. When properly drained, cargo tank vehicles should not contaminate ULSD even if 15-ppm is hauled in the same compartment that contained gasoline or 500-ppm diesel fuel.
- In many instances, terminals are supplying ULSD with a content well below 10-ppm. However, terminal operators are generally reluctant to tell customers the real sulfur content of the fuel. Instead they simply say it is 15-ppm. Talk to your terminal operator and ask for the real sulfur content of the ULSD they supply.
- Testing is not required, but necessary for all parties above the retail level in order to defend against liability in an EPA enforcement action. Just because you did not test the batch in question does not mean you can't prove that you did not cause the contamination. The EPA does not require you to test every batch.
- For more information about testing and ensuring compliance with EPA ULSD regulations see *TPCA Regulatory Alert # 406 (10/2/2006)*, **ULSD Quality Assurance Plan**.

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