

## Focus on Fuels

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### TM&C Services in Fuel Regulations

TM&C provides a full range of services in its fuels regulatory practice. Some of these services are listed below.

- Preparing, reviewing and submitting fuels reports, including CDX submissions.
- Facility audits for compliance with fuels programs.
- Interaction with EPA to pose fuels-related questions.
- Industry specialist assistance for required gasoline attestations.
- Industry specialist assistance for in-line blending audits.

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### How are Your VARs?

Volumetric Additive or Accounting Reconciliations (VARs) have been a part of the gasoline and diesel landscape since around 1994. They were part of the regulations passed to meet the congressional requirement to include detergent additives in gasoline and the more recent requirements to limit the sulfur in diesel to 15 ppm. VAR usage will expand when gasoline sulfur is limited to 10 ppm in 2017. This is probably a good time to review your VARs for current requirements and for the impending new information.

### Something Old and Something New

by Tom Hogan

#### *VAR History*

On December 6, 1993, EPA published a notice of proposed rulemaking to govern the use of deposit control (detergent) additives in all gasoline used in the United States beginning January 1, 1995. A final rule for an interim detergent additive program was published in the Federal Register on November 1, 1994 with an effective date of January 1, 1995. This regulation was replaced with the final additive program published in the Federal Register on July 5, 1996 with an effective date of September 3, 1996. The goal of the program was simple. Require a minimum amount of detergent additive to control intake valve deposits (IVD) and injector deposits (Port Fuel Injectors Deposits (PFID) throttle body injector deposits and later Direct Gasoline Injection Deposits (DGI)). Unlike many of the programs which required extensive annual reporting, the detergent additive regulations required minimal direct reporting to the EPA but extensive document retention to prove the gasoline had been properly additized. The additization almost always occurs as the gasoline is loaded onto trucks for delivery to the service station. EPA recognized that it would be impractical to test each truck for the proper amount of additive and allowed records that showed the additive rate met a manufacturers minimum based on total additive used divided by total gasoline additized. The backbone of the documentation is the volume additive reconciliation records which memorialize that the monthly (shorter periods are allowed) detergent added to gasoline meets the minimum requirements.

Volumetric Accounting Reconciliations are also used to show that higher sulfur diesel additives, red dye and anti-static additives, do not increase the sulfur content of ultra-low sulfur diesel above 15 parts per million. Note that the objective of the two programs is just the opposite. The detergent additive VAR is to assure a minimum additive rate while

- Assistance in setting up a fuels compliance group/program.
- Personnel reviews of compliance-related groups.
- Compliance status reviews and recommendations.
- Negotiations/consultation during EPA enforcement actions.
- 3rd-Party Engineering reviews.
- Due diligence reviews of facilities and companies in RFS RINs Program.

the diesel VARs are designed to assure the additive concentration does not exceed some maximum.

In 2017, when most gasoline refiners will be limited to an annual average sulfur content of 10 ppm, some information on the sulfur contribution of gasoline additives to the finished gasoline will be required to be added to the gasoline detergent VARs.

#### *Check Your VARs*

§80.157 of the code of federal regulations detail the VAR requirements for detergent in gasoline. Some of the important information required on the VARs include gasoline volume additized, targeted additive rate, detergent additive used in the gasoline and the specific dates for the VAR. Other information is required under certain circumstances, e. g. post refinery components (PRC) to be added to the gasoline and the additive included for the PRC. Additive meters must be calibrated on a specific schedule. And the length of any VAR period must be no longer than 31 days. It is important to note that the detergent additive compliance is based on the average concentration of each additive for a VAR period compared with the lowest acceptable additive rate (LAC) which is supplied by the manufacturer. Most gasoline regulations require per gallon compliance. As long as the target rate for any additive concentration is equal to or greater than the LAC and the total concentration meets or exceeds the LAC requirement, the additive requirement is deemed to have been met.

§80.614 of the code of federal regulations detail the alternative defense for higher sulfur red dye and anti-static diesel additives. Again, the purpose of the VAR is to assure that too much additive was not used. Therefore, instead of an LAC, the diesel VARs have a maximum additive concentration limit or MAC set by the additive manufacturer. The actual additive concentration for any VAR period or for any target cannot exceed the MAC. In addition, the diesel VARs must include information on the impact on the sulfur contribution of the additive to the diesel fuel. The VAR usage, as an alternative defense, is limited to red dye and anti-static additives. Other higher sulfur diesel additives must establish other defenses to show the ULSD sulfur limit was not exceeded.

EPA envisioned the VARs to be a primary alternative defense. The regulations require a detergent additizing facility to produce the last twelve months of VARs within 1 hour of an EPA request for the documents. In addition, certain supporting documentation must be available to the EPA by the beginning of the next business day.

The VARs were designed by each company, since the EPA did not supply a standard form. Therefore, there are many formats out in the industry. Also, the regulations were promulgated 20 years ago and the VARs were all designed in that time frame. As a result, most of the folks filling out the forms no longer have much, if any, familiarity with the regulations or why they must keep the records.

With the impending addition of gasoline sulfur information on the VARs in 2017, we recommend a thorough review of existing VARs and designs for the new information. It would also be appropriate to conduct training for those in your organization on the need for and use of the VARs.

We have worked with other clients on these regulations and could help you with yours. Contact us if you have any questions or if we can help

you.

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