

## SAMPLING & TESTING UNDER DOT/PHMSA RULE 49 CFR 173.41: ARE YOU IN COMPLIANCE?

Effective July 1, 2015, the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration (DOT/PHMSA) established rule 49 CFR 173.41 which is geared to address the crude by rail transportation methods. According to 49 CFR 173.41, PHMSA and the Federal Railroad Administration (FRA) adopted requirements designed to reduce consequences and, in some cases, reduce the frequency of accidents involving trains transporting quantities of flammable liquids. However, it also adopts a more accurate approach to classification of unrefined, petroleum-based products.



### **Is your product considered unrefined, petroleum-based?**

PHMSA has commented that "unrefined, petroleum-based products" are any material that is petroleum-based and has not undergone refinement. PHMSA has also stated that heater-treating to reduce vapor pressure in crude oil for transportation is not considered refinement because it would not meet the American Fuel and Petrochemical Manufacturers (AFPM) or other industry definitions of refining. However, heater treating and separation of gasses through a distillation column is considered by AFPM to be a refinement process.

**How do these requirements affect you?** Anyone transporting petroleum products by rail or truck are required to develop and maintain a sampling and testing program for all unrefined petroleum-based products —such as crude oil—to address the following:

- Frequency of sampling and testing to account for any appreciable variability in the product
- Sampling prior to the initial offering of the product for transportation and when changes affect the properties of the product
- Sampling methods that ensure a representative sample of the product (API Chapter 8.1)
- Testing methods that enable classification of the product under the Hazardous Materials Regulations (HMR)
- Quality control measures for sample frequencies
- Duplicate samples or equivalent measures for quality assurance
- Criteria for modifying the sampling and testing program
- Testing for any other methods used to identify properties of the mixture relevant to packaging requirements

Companies must certify that their program complies with the requirements set forth in §172.204 of 49 CFR, document the program retention and annual updates, and make the information available to DOT officials upon request.

Enforcement of the requirements include unannounced inspections, data collection, and sampling by PHMSA representatives at various points along the crude oil supply chain. The final rule does make it clear that ANSI/API Recommended Practice (RP) 3000, although not adopted by the DOT, does provide guidance for compliance with the DOT ruling.

While the many requirements can be overwhelming, SPL can help guide you through the compliance process. Contact SPL's experts today at 877-775-5227 and let us help you meet the stringent requirements of this challenging regulation.