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16 CFR Part 306, Project No. R811005

The American Fuel & Petrochemical Manufacturers (“AFPM”) submits the following comments on the Federal Trade Commission’s (FTC) proposed amendments to its rule for Automotive Fuel Ratings, Certification and Posting (79 *Fed. Reg.* 18850; April 4, 2014). AFPM is a national trade association representing virtually all U.S. refiners and petrochemical manufacturers. AFPM’s refinery members operate 122 U.S. refineries comprising approximately 98 percent of U.S. refining capacity.

FTC proposes to revise retail pump labeling requirements for gasoline-ethanol blends and allow an alternative octane rating test method using an infrared spectrophotometer. AFPM is concerned that the FTC proposal could conflict with ethanol labeling standards under consideration by the National Conference on Weights and Measures and with EPA’s E15 misfueling mitigation labels. AFPM also is concerned with the absence of a referee test method where octane tests yield disparate results and believes that FTC should authorize other octane test methods. We address these issues in greater detail in the attachment.

Our nation’s petroleum refiners are committed to manufacturing safe, reliable and clean gasoline. We take the confidence that Americans place in our products – demonstrated by the millions of times each day that consumers purchase gasoline – very seriously. We remain concerned about potential misfueling since mid-level ethanol blends cannot be used in small engines or older vehicles. Potential misfueling may occur intentionally, due to a perceived price differential, or unintentionally, due to confusion or inattention.

Sincerely,

Attachment

**COMMENTS OF THE
AMERICAN FUEL & PETROCHEMICAL MANUFACTURERS
ON THE FEDERAL TRADE COMMISSION’S PROPOSED
AMENDMENTS FOR
AUTOMOTIVE FUEL RATINGS, CERTIFICATION
AND POSTING RULE**

16 CFR Part 306, Project No. R811005

79 Fed. Reg. 18850 (April 4, 2014)

The American Fuel & Petrochemical Manufacturers (“AFPM”)¹ submits the following comments on the Federal Trade Commission’s (FTC) proposed amendments to its rule for Automotive Fuel Ratings, Certification and Posting.² FTC proposes to revise retail pump labeling requirements for gasoline-ethanol blends and allow an alternative octane rating test method using an infrared spectrophotometer. AFPM is concerned that the FTC proposal could conflict with ethanol labeling standards under consideration by the National Conference on Weights and Measures (“NCWM”) and with EPA’s E15 misfueling mitigation labels. AFPM also is concerned with the absence of a referee test method where octane tests yield disparate results and believes that FTC should authorize other octane test methods. We address these issues in greater detail below.

Our nation’s petroleum refiners are committed to manufacturing safe, reliable and clean gasoline. We take the confidence that Americans place in our products – demonstrated by the millions of times each day that consumers purchase gasoline – very seriously. We remain concerned about potential misfueling since mid-level ethanol blends cannot be used in small engines or older vehicles. Potential misfueling may occur intentionally, due to a perceived price differential, or unintentionally, due to confusion or inattention.

We support FTC’s efforts to inform consumers of potential problems with the use of mid-level ethanol blends and to avoid conflicts with EPA’s E15 Misfueling Mitigation rule.³

AFPM’s comments address the ethanol blend definition, the pump labels, and the infrared method amendments.

¹ AFPM is a national trade association representing virtually all U.S. refiners and petrochemical manufacturers. AFPM’s refinery members operate 122 U.S. refineries comprising approximately 98 percent of U.S. refining capacity.

² The public comment period was extended; *see* 79 *Fed. Reg.* 31891 (June 3, 2014).

³ Regulation To Mitigate the Misfueling of Vehicles and Engines With Gasoline Containing Greater Than Ten Volume Percent Ethanol and Modifications to the Reformulated and Conventional Gasoline Program, 76 *Fed. Reg.* 44,406 (July 25, 2011).

Ethanol Blend Definition

- AFPM strongly recommends that the definition for “Ethanol blend” be changed to “a mixture of gasoline and ethanol containing more than 15 volume percent ethanol”.
- E15 should be included in the definition of gasoline. FTC should take the step to directly add it to the definition as follows:

Gasoline, an automotive spark ignition engine fuel, which includes, but is not limited to, gasohol (generally a mixture of approximately 90 percent unleaded gasoline and 10 percent ethanol) and fuels ~~developed to comply with~~ authorized for sale under the Clean Air Act, 42 U.S.C. 7401 et seq., such as reformulated gasoline, oxygenated gasoline, and E15⁴

- With the inclusion of E15 in the definition of gasoline, E15 will be subject to both the certification and pump label requirements of gasoline (e.g., octane disclosure). The FTC should then also remove from its proposal the exclusion for E15 in 306.10 - Automotive fuel rating posting.

Any gasoline-ethanol blend that contains greater than 10 volume percent ethanol and not more than 15 volume percent ethanol (E15) was conditionally waived by EPA (subject to use in vehicles MY2001 and newer only) and therefore authorized for sale as gasoline. To address the fact the E15 waiver applies only to certain gasoline engines, EPA promulgated a Misfueling Mitigation rule. The EPA’s Misfueling Mitigation rule requires that all gasoline fuel dispensers selling E15 have a specific EPA label to inform consumers on regulatory conditions and potential damage to certain engines.

It appears that FTC may believe that only a portion of E15 has been waived by EPA. If that is the case, then only a portion of the E15 sold must use the EPA E15 retail pump label and would be exempt from the proposed FTC label, while the other E15 that has not been waived by EPA would not be exempt from the proposed FTC pump label. This may be inferred from the following sentence in FTC’s proposal: “Moreover, the proposed exemption is narrowly tailored to ensure that only E15 blends that obtain an EPA waiver, and therefore are labeled according to EPA rules, are exempt from FTC’s labeling requirements.”⁵ We strongly disagree with this proposed approach and believe that all E15 is subject to the EPA Misfueling Mitigation rule.

To rectify this, the proposed regulatory definition in 16 CFR section 306.0 for “(o) Ethanol blend” should be changed from “containing more than 10 percent ethanol” to “containing more than 15 volume percent ethanol”. This will clarify that the scope of

⁴ See existing FTC regulation 16 CFR 306.0; suggested deletions and additions marked with strikethrough and underlines, respectively.

⁵ 79 *Fed. Reg.* 18860; see also 79 *Fed. Reg.* 18857 n. 109 (“provided that retailers use EPA’s required label”).

FTC's rulemaking applies only to ethanol blends greater than E15 and does not overlap with EPA's E15 Misfueling Mitigation rule.⁶

This regulatory edit is also consistent with FTC's proposal to list "ethanol blends" in 16 CFR 306.0(i)(2)(iii) as an alternative liquid automotive fuel since ethanol blends with more than 15 volume percent ethanol have not been waived by EPA. To further avoid confusion, E15 should also be added to the gasoline definition in 16 CFR 306.0(i)(1) as an additional fuel authorized for sale under the Clean Air Act.

Pump Labels

- We recommend that a harmonization of the pump label requirements across the various industry regulating agencies is necessary. The NCWM has identified and documented an acceptable practice for ethanol blends pump labeling, and AFPM agrees that it would be satisfactory that FTC align with these requirements.
- AFPM agrees that having both statements, "**MAY HARM OTHER ENGINES**" and "**CHECK OWNER'S MANUAL**", would satisfy NCWM requirements and be satisfactory for FTC to adopt.

AFPM feels that FTC's proposed pump label for ethanol blends is unworkable. The single label for all ethanol blends with ethanol content rounded to the nearest factor of 10, is not practical compared to the complexity of the fuel sold in the real world. This is particularly true for ethanol blends containing more than 50% ethanol (formerly referred to as E85). There is an ASTM specification for these high ethanol blends (ASTM D5798 Standard Specification for Ethanol Fuel Blends for Flexible-Fuel Automotive Spark- Ignition Engines) that varies to account for seasonal temperature changes. In order to meet the ASTM specification, it is necessary to vary the ethanol content during the year to meet these seasonal specifications. The FTC proposal would result in retailers being required to change the pump labels throughout the year as the ethanol blend volumes changed seasonally to meet the applicable ASTM specification.

In order to address this problem and bring consistency to the market, AFPM recommends that FTC's pump label for ethanol blends be harmonized with the labeling plan developed by the NCWM through a consensus process⁷. The Office of Management and Budget strongly prefers voluntary consensus standards over government-unique standards and addresses the situation where the development of a voluntary consensus standard is already in progress:

⁶ 40 CFR 80: Subpart N – Additional Requirements for Gasoline-Ethanol Blends.

⁷ 2014 edition of NCWM Publication 16 (Agenda Items 232-6 and 237-9).

j. What if a voluntary consensus standards body is likely to develop an acceptable, needed standard in a timely fashion?

If a voluntary consensus standards body is in the process of developing or adopting a voluntary consensus standard that would likely be lawful and practical for an agency to use, and would likely be developed or adopted on a timely basis, an agency should not be developing its own government-unique standard and instead should be participating in the activities of the voluntary consensus standards body.⁸

Although the NCWM label regulations are only proposed (not yet final), AFPM’s recommendations below are in alignment with NCWM’s proposal. NCWM’s proposed label meets FTC’s objective of providing information to the consumer concerning the automotive fuel they are purchasing. Also, various states already adopt and enforce NCWM regulations and it will undermine compliance efforts and confuse consumers if FTC and NCWM labels are different.

AFPM, in alignment with NCWM language, recommends that FTC regulations should have two separate labels for ethanol blends: one for ethanol blends with an ethanol concentration of no less than 51 volume percent and no greater than 83 volume percent, and one for ethanol blends with an ethanol concentration of no less than 16 volume percent and no greater than 50 volume percent. While each label will have separate language to identify the ethanol component of the blend; both labels should contain the following two statements: “MAY HARM OTHER ENGINES” and “CHECK OWNER’S MANUAL”. The first statement was already proposed by FTC, and the second will satisfy NCWM requirements.

AFPM recommends the following example label for a blend with 16-50 volume percent ethanol (E40 in this example, the same as the example in FTC’s proposal):



⁸ OMB Circular No. A-119, “Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities” (see section 7 of the 1998 version).

The FTC regulations would then require for a blend with 16-50 volume percent ethanol, a label with “EXX Flex Fuel, minimum YY % ethanol”, where XX is the target ethanol concentration in volume percent and YY is XX minus 5. The actual ethanol concentration of the blend shall be plus or minus 5 volume percent of the ethanol content identified by the EXX on the label.

AFPM recommends the following label for blends with greater than 50 volume percent ethanol:



As ethanol content for higher percentage ethanol blends varies seasonal, or by location, a single label would satisfy these blends by identifying the minimum ethanol content allowed by the ASTM method for these blends.⁹

Octane Certification

- FTC should approve the certification of gasoline and gasoline ethanol blends using infrared technology validated by ASTM D6122 “Standard Practice for Validation of the Performance of Multivariate Infrared Spectrophotometers” as proposed and include a statement establishing D2699 and D2700 as referee methods to handle any disputes in the measurement of octane.
- AFPM also believes the FTC should provide language that allows any analytical technology that has a correlation method approved by experts (ASTM) to be allowed for octane determination, provided that a referee method is also established.

AFPM members have significant experience in octane determination and we agree with FTC that the rule should be amended as to provide additional flexibility, with some modifications however.

First, the proposed rule in Section 306.5 currently references dated versions of the ASTM specifications for gasoline (D 4814), and ASTM methods for measuring

⁹ D5798 – Standard Specification for Ethanol Fuel Blends for Flexible-Fuel Automotive Spark-Ignition Engines.

research and motor octane (D 2699 and D 2700 respectively), and the correlative testing infra-red (IR) test method requirements for use (D 6122). These versions are old. These ASTM test methods and the ASTM specification for gasoline are periodically updated. For example, there are 2013 versions: D 2699-13b, D2700-13b, D 4814-13b and D 6122-13.

If FTC incorporates specific versions, then it will be necessary for FTC to later amend its regulations to incorporate further ASTM updates. We suggest that FTC's regulations refer to the latest versions to avoid frequent amendments. We do not want FTC's regulations to become quickly obsolete or inconsistent with the latest versions.

Second, it is imperative that should there be a difference or dispute regarding a testing result derived from a correlative method, a referee standard must be established. The referee will always be the standard methods outlined in ASTM D4814. The Commission suggests that it does not want to adopt a "referee" method stating: "*The Commission does not propose adopting Tesoro's suggestion to designate D2699 and D2700 as 'referee tests'. Tesoro appears to be recommending that the Rule provide that a fuel's rating derived through the infrared method is invalid if it differs from the rating derived through D2699 and D2700. However the record does not show that D2699 and D2700 are superior to the infrared method. Thus there is no reason to favor one approved rating method over another.*"¹⁰ It is important that the referee language remain.

The ASTM engine octane tests D2699 and D2700 define the octane numbers of the fuel and therefore must be the referee method. Other measurement techniques are correlative methods that relate the fuel combustion properties as measured on the engines to spectra measured of the fuel. Thus the engine test methods are by definition the fundamental measurement of octane, while the other correlative methods rely on the engine test methods to relate the octane to the observed spectra of the fuel under test. By definition the correlative methods cannot be the referee or primary octane test methods.

All correlative test methods such as infrared and others must relate the results obtained (i.e., spectra inferred octane) to the engine test methods as required in ASTM D 4814 for gasoline certification. While the *precision* of these correlative methods is greater than the standard methods of octane testing (D2699 and D2700), their purpose is only to predict the standard method results.

Gasoline has been classified utilizing ASTM D2699 and D2700 in this manner for over 60 years. These are both test methods that actually combust the fuel utilizing spark ignition technology similar to what is used in most gasoline or ethanol flex fuel vehicles on the road today. Replacing this combustion-based technology testing with a chemical make-up test technology may or may not be fully functional or directly applicable to today's fuels or automobile needs.

¹⁰ 79 Fed. Reg. 18861.

Since the advent of the near infrared instruments to measure octane, there have been numerous incidents of State enforcement agencies testing point-of-sale and declaring the fuel was not compliant. Upon conducting engine testing, the fuel was found to meet the minimum octane level as labeled. If there is no referee method identified, these situations could become much more difficult to resolve. Therefore, it is important for section 306.5(a) to accommodate the referee language above.

Third, there are other measurement technologies and methodologies besides infrared that the industry has extensive experience with that should be allowed in addition to ASTM D2699 and D2700 for gasoline octane certification as long as certain correlative criteria for each method is used. We suggest a revision to Section 306.5(a) to allow these alternative approaches as well. Suggested regulatory language is included below:

- (a) To determine the automotive fuel rating of gasoline, add the research octane number to the motor octane number and divide by two, as stated by ASTM, International (formerly known as the American Society for Testing and Materials) in ASTM *D4814-13b*, entitled “Standard Specifications for Automotive Spark-Ignition Engine Fuel.” To determine the research octane and motor octane numbers you may do one of the following:
 1. Use ASTM standard test method D2699-13b, “Standard Test Method for Research Octane Number of Spark-Ignition Engine Fuel”, to determine the research octane number, and ASTM standard test method D2700-13b, “Standard Test Method for Motor Octane Number of Spark-Ignition Engine Fuel”, to determine the motor octane number;
 2. Use the test method set forth in ASTM D2885-13, “Standard Test Method for Determination of Octane Number of Spark Ignition Engine Fuels by On-line Direct Comparison Technique”;
 3. Use a multivariate infrared spectrophotometer, as described in Section 6.1.1 of ASTM D6122-13, “Standard Practice for Validation of the Performance of Multivariate Infrared Spectrophotometers,” to determine the research octane number and the motor octane number following the procedures set forth in ASTM D6122-10 to correlate the measured research and motor octane numbers with the results of test methods ASTM D2699-13b and ASTM D2700-13b. D2699-13b and D2700-13b remain the referee methods in case of dispute: or
 4. Other test technologies and methodologies that are correlated with D2699-13b and D2700-13b using ASTM D 6708-13 may be used to determine the automotive fuel rating. However, if alternate technologies and methodologies are used, D2699-13b and D2700-13b remain the referee methods in case of dispute.