

## Focus on Fuels

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### 1 PSI RVP Waiver for Summer Gasoline What is it?

Like so many things that I "know," my thoughts on the 1 psi waiver for gasoline containing ethanol were incomplete and included logical assumptions that were not necessarily correct. I would be willing to bet that at least 95% of those reading this article would come up with the description of the waiver as, summertime gasoline containing 9-10 volume percent of ethanol can exceed the RVP limit by up to 1 psi. This simple concept is causing lots of discussion because gasoline with higher ethanol content, namely E15 does not enjoy the 1 psi waiver. Extending the waiver to E15 is a semiannual (if not monthly) discussion point in negotiations to increase the use of renewable fuels by removing impediments to the acceptance of E15. The waiver is also a fascinating study in the nuances of regulations.



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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

### 1 PSI RVP Waiver for Summer Gasoline

#### Not Really a 1 psi Waiver

The vapor pressure increase response for adding ethanol to gasoline is neither linear nor even predictable without some variability. The legislators that passed the legislation had informed advice and understood this nuance and included a defense deeming finished gasoline that exceeded the standard RVP by more than 1 psi as compliant as long as the gasoline portion of the blend meets the RVP standard without the 1 psi waiver and certain quality assurance programs are in place. In effect, the RVP of the ethanol blend has no limit.

#### Not Really 9-10 Volume Percent Ethanol Requirement in the Legislation

For a seemingly simple concept, ethanol content between 9-10 vol% - it is surprising how many things could be interpreted differently. An excerpt from the statute allowing the 1 psi waiver is shown below. See the complete citation at the end of the article.

*"For fuel blends containing gasoline and 10 percent denatured anhydrous ethanol"*

- assistance for in-line blending audits.
- 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 most obvious difference between the citation and the current regulations is that a minimum ethanol percentage is not mentioned. In addition, the percentage is not identified as volume percent. It could be interpreted to be weight percent. It is logical that the EPA included the 9 vol% lower limit as an accommodation to those producing the material since the addition of exactly 10% denatured anhydrous ethanol would not be possible at a fuel distribution terminal. Requiring an exact amount would have essentially eliminated the practical use of the waiver.

Finally, the requirement in the legislation that the percentage of ethanol must be denatured anhydrous ethanol was later interpreted by the EPA to actually mean ethanol without the denaturant. See the following excerpt from the December 1991 Federal Register Final Rulemaking preamble.

"EPA is revising its regulations to require the use of denatured, anhydrous ethanol as a specific condition for the one psi allowance for ethanol blends. *However, EPA is not making any change to the current requirement that the blend contain between 9 and 10 percent ethanol (by volume), excluding the denaturing agent, to obtain the one psi allowance.*"

The genesis of this interpretation was to avoid using a denatured anhydrous ethanol with high denaturant contents. The example in the preamble cited two denatured ethanols, one with 10 vol% denaturant and one with 20 vol% denaturant. In both cases, the ultimate measure of whether the fuel met the required minimum was based on the ethanol without the denaturant. Presumably, EPA arrived at this interpretation in order to insure that ethanol/gasoline mixture was not deliberately, excessively denatured because the waiver was added to increase the ethanol market, not the denaturant market.

### **Current Significance**

The current debate on extending the waiver to E15 is heavily dependent on political considerations involving renewable fuel suppliers versus petroleum fuel suppliers. A question that comes up early in any discussion is whether the waiver can be extended without Congressional action. I believe that question can only be answered by the legal profession and it might even be necessary to sort that question out through the court system. However, since it's my article, I will give you my observations.

### **Does the 1 psi Waiver for E-15 Require Congressional Approval?**

The quick answer is that I believe the waiver can be extended to E15 without additional Congressional approval.

The legislation did not include a minimum 9 vol% ethanol. That was included by the EPA to make the waiver practical. In fact, the EPA's interpretation that the waiver applies to blends with 9-10 vol% ethanol seems to violate the simple reading that the blend includes 10 vol% ethanol. Logically, if the Agency can add a lower limit of 9 vol% to make the waiver practical, it seems the Agency could also add a higher limit of 15 vol% to make the production of E15 practical. After all, the legislation

only requires 10 percent ethanol and E15 contains 10 vol% ethanol.

Finally, an argument can be made that the legislation considers the 10% limit to be a maximum, based on the following language.

"no additional alcohol or other additive has been added to increase the Reid Vapor Pressure of the ethanol portion of the blend."

I do not believe this language should be read that 10 vol% ethanol is an upper limit because ethanol addition from 10-15 vol% does not increase RVP, but actually slightly lowers the RVP.

Turner, Mason & Company can help you sort through these and any other fuel regulatory issues. Give us a call; we always enjoy chatting about denatured anhydrous ethanol.

### **United States Code Citation**

42 U.S.C.

United States Code, 2013 Edition

Title 42 - THE PUBLIC HEALTH AND WELFARE

CHAPTER 85 - AIR POLLUTION PREVENTION AND CONTROL

SUBCHAPTER II - EMISSION STANDARDS FOR MOVING SOURCES

Part A - Motor Vehicle Emission and Fuel Standards

Sec. 7545 - Regulation of fuels

From the U.S. Government Publishing Office, [www.gpo.gov](http://www.gpo.gov)

§7545. Regulation of fuels

#### **(h) Reid Vapor Pressure requirements**

##### **(4) Ethanol waiver**

For fuel blends containing gasoline and 10 percent denatured anhydrous ethanol, the Reid vapor pressure limitation under this subsection shall be one pound per square inch (psi) greater than the applicable Reid vapor pressure limitations established under paragraph (1); Provided, however, That a distributor, blender, marketer, reseller, carrier, retailer, or wholesale purchaser-consumer shall be deemed to be in full compliance with the provisions of this subsection and the regulations promulgated thereunder if it can demonstrate (by showing receipt of a certification or other evidence acceptable to the Administrator) that-

(A) the gasoline portion of the blend complies with the Reid vapor pressure limitations promulgated pursuant to this subsection;

(B) the ethanol portion of the blend does not exceed its waiver condition under subsection (f)(4) of this section; and

(C) no additional alcohol or other additive has been added to increase the Reid Vapor Pressure of the ethanol portion of the blend.

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