

## US Environmental Protection Agency Air and Radiation Office of Transportation and Air Quality

**April** 1998

Mr. Urvan Sternfels President National Petroleum Refiners Association Suite 1000 1899 L Street, N.W. Washington, D.C. 20036

Dear Mr. Sternfels:

This letter addresses two issues related to the reformulated gasoline ("RFG") program.

## Extension of Time Allowed for Using Alternative Test Methods

On November 13, 1996, the Environmental Protection Agency (EPA) published a rule modifying the RFG regulations to extend the termination date for use of alternative test methods for oxygenates and aromatics under 40 CFR §§ 80.46(f)(3) and (g)(9), from January 1, 1997, to September 1, 1998. 60 FR 58304. This extension was intended to allow parties to continue using the alternative test methods until final agency action on a performance based test method rulemaking that currently is underway. The performance based test method rulemaking may allow use of alternative test methods for most parameters. With the extension, parties can make long-term test method decisions based on all of the testing options available at the conclusion of the performance based test method rulemaking.

However, EPA now does not expect to take final action on a performance based test method rulemaking by September 1, 1998. As a result, EPA intends to promulgate a revision to the RFG regulations to further extend the time allowed for using the alternative analytical test procedures for aromatics and oxygenates. Parties have expressed concern that they need to begin planning for test method changes in the immediate future if the time allowed for use of the alternative methods is not extended. To alleviate this concern, as a matter of enforcement discretion, EPA will allow use of the alternative analytical test procedures for aromatics and oxygenates under §§ 80.46(f)(3) and (g)(9). This exercise of enforcement discretion will end when EPA takes final agency action regarding an extension of the September 1, 1998, deadline currently provided in the regulations.

## Valid Range Limits for RFG

As you know, under 40 CFR § 80.41(i) the RFG standards for VOC, toxics and NOx emissions performance became effective on January 1, 1998. Compliance with these standards is determined using the equations specified at 40 CFR § 80.45 (the "complex model") based on a gasoline's tested parameter values for sulfur, aromatics, olefins, distillation, and so on. However, 40 CFR § 80.45(f)(1)(i) specifies limits on the parameter values that may be used under the complex model (the "valid range limits"), because the model has not been shown to accurately predict emissions when parameter values outside the range limits are used.

The toxics and NOx emissions performance standards apply only when gasoline is produced at a refinery or is imported (the "refinery level"), while the VOC emissions performance standard applies both at the refinery level and through a per-gallon limit on VOC emissions performance at downstream locations such as terminals and retail outlets. The VOC emissions performance standard is intended to reduce ozone-forming emissions and the downstream standard will apply at downstream terminals beginning on May 1, 1998.

On July 11, 1997, EPA proposed regulatory language to clarify its prior interpretation that the complex model valid range limits are separate per-gallon standards under the RFG program, both when RFG is produced at refineries and at downstream locations. Several refiners and refiner trade associations commented on this proposal, agreeing that RFG should have parameter values that fall within the valid range limits at the refinery level, but questioning the need to impose the valid range limits at downstream facilities. These commenters expressed concern that pipelines would adopt commercial specifications for RFG that are more stringent than the valid range limits to ensure downstream compliance with the range limits, which would have the effect of constraining the parameter values available to refiners to less than the ranges allowed under § 80.45(f)(1)(i).

EPA intends to take final rulemaking action on the proposal regarding the valid range limits as standards for RFG in the near future. Pending final action on this issue, EPA will enforce the range limits in the following manner. First, the complex model valid range limits specified at § 80.45(f)(1)(i) will continue to be enforced as standards that apply when RFG is produced or imported. As a result, no refiner or importer may certify a batch of gasoline as RFG unless the gasoline's parameters are within the complex model valid range limits specified at § 80.45(f)(1)(i).

Second, as a matter of enforcement discretion EPA will not enforce the complex model valid range limits for RFG at locations downstream of the refinery level, but only where the VOC emissions performance of the gasoline is calculated in the following manner and it meets the downstream per-gallon standards based on this calculation. In the case of any gasoline sample with a tested parameter value that is outside the valid range limit, the VOC emissions performance must be calculated using either the tested value or the valid range limit value as

specified in Table 1. The values specified in Table 1 result in the greatest VOC emissions, and as a result are the most protective of the environment.<sup>1</sup>

| Table 1.     | Parameter values to use for calculating VOC, NOx and toxics emissions performance under the complex model when tested parameter values are outside the complex model's valid range limits. | Tested Value<br>for RFG<br>Parameter | Parameter<br>Value to Use<br>for<br>Calculating<br>Emissions<br>Performance<br>for |  |
|--------------|--|--------------------------------------|--|--|
| VOC          |  | NOx                                  | Toxics   | oxygen > 4.0 wt%                                 |
| 4.0 wt%      |  | 4.0 wt%                              | 4.0 wt%  | sulfur > 500<br>ppm                              |
| tested value |  | test value                           | tested value   | RVP (VOC<br>controlled<br>RFG only)<br>< 6.4 psi |
| 6.4 psi      |  | 6.4 psi                              | 6.4 psi  | > 10.0<br>psi                                    |
| tested value |  | tested value                         | tested value   | aromatics > 50 vol%                              |
| tested value |  | tested value                         | tested value   | olefins > 25<br>vol%                             |
| 25.0 vol%    |  | tested value                         | tested value   | benzene > 2.0 vol%                               |
|              |  |                                      |  |  |

<sup>&</sup>lt;sup>1</sup> For example, the RFG complex model valid range limit for sulfur is a maximum of 500 parts per million (ppm). If an RFG sample, collected at a downstream location, is found to have a sulfur content of 550 ppm the VOC emissions performance must be calculated using 550 ppm sulfur, because this gives a VOC emissions result that is higher than if 500 ppm sulfur were used.

| N/A          | N/A          | tested value | E200 < 30%   |
|--------------|--------------|--------------|--------------|
| tested value | 30%          | tested value | > 70%        |
| tested value | tested value | 70%          |              |
| E300 < 70%   | tested value | tested value | tested value |

A refiner or importer, or a consortium representing the refiner or importer under § 80.65, must also use this approach when RFG samples are evaluated for VOC, NOx and toxics emissions performance during gasoline quality surveys conducted under § 80.65. Thus, Table 1 also specifies the values (tested value or valid range limit value) that must be used to calculate NOx and toxics emissions performance for samples collected during gasoline quality surveys in order for the enforcement discretion described above to apply. Under this approach, a gasoline sample will continue to be excluded from a survey if the sample violates a per-gallon downstream standard (i.e., the downstream standards for benzene, oxygen or VOC emissions performance), but no sample will be excluded from a survey simply because it has a parameter value outside the complex model valid range limits.

This exercise of enforcement discretion will expire when EPA takes final agency action on the July 11, 1997, proposal regarding valid range limits for RFG.

If you have any questions, you may call George Lawrence, Chief of the Mobile Source Enforcement Branch, at (202) 564-1307.

Sincerely,

Steven A. Herman