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Office of Transportation and Air Quality

Environmental Fact Sheet

Proposed Change to Requirements for Transition from Winter to Summer Grade RFG

Today's Action

The Environmental Protection Agency (EPA) today proposed an action that will make it easier for tank terminals to make the transition from winter to summer grade reformulated gasoline (RFG). This action will require tank terminals to accept only summer grade RFG beginning April 15 of each year. The EPA is also proposing to simplify existing regulations to improve refiners' flexibility to sell gasoline blendstocks.

Currently, there is no date by which terminals must begin receiving summer grade RFG. However, tanks at terminals must contain only summer grade RFG by May 1. As a result, terminal operators typically draw down their levels of winter grade gasoline as May 1 approaches, causing an abrupt reduction in inventories of gasoline and higher gas prices. Today's proposal would essentially increase the amount of time terminals have to make the changeover from winter to summer grade RFG.

We are also proposing to eliminate the existing blendstock accounting regulations and replace them with simpler regulations. This action will allow refineries more flexibility to sell gasoline blendstocks and improve refiners' overall ability to produce gasoline by eliminating significant reporting required by the current blendstock account regulations.

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Background

In the Clean Air Act, Congress specified EPA develop emission performance standards for RFG for the ozone season. EPA promulgated the performance standards in a February 16, 1994 Federal Register notice. With the exception of the air toxics standard which is in effect year-round, all other emission performance standards are in effect for the summertime (i.e., the ozone season). Such RFG is referred to as summer RFG.

There are some important differences between winter and summer gasoline. Most notably, winter grade gasoline has a higher Reid Vapor Pressure (RVP) than summer grade gasoline. RVP is a measure of a gasoline's volatility, or the tendency for a gasoline to evaporate. Each spring, refiners must reduce gasoline RVP to comply with federal summer emissions requirements. Refiners, gasoline terminal facilities and retail stations must replace high RVP winter grade gasoline in storage tanks with lower RVP summer grade gasoline. EPA regulations stipulate that gasoline retailers must be selling only summer grade RFG by June 1 of each year. In order to meet the June 1 compliance date, EPA regulations stipulate that by May 1 terminals and all other facilities upstream of the retailer must have only those gasolines that meet the summertime requirements.

Currently, some terminals wait until very late in April to drain as much winter grade RFG as possible from their tanks before refilling the tanks with summer grade RFG. This practice can potentially cause low inventories of RFG. Requiring all terminals to begin receiving summer grade RFG by a fixed date will allow terminals to more gradually turn over their tanks from winter to summer grade RFG, and help spread out the turn over the last two weeks in April, instead of many terminals turning over their tanks simultaneously at the end of April.

The blendstock accounting regulations were originally meant to restrict emissions by preventing excessive transfers of high-emissions gasoline blendstocks ("dirty" blendstocks) from refineries which produced relatively low-emissions gasoline (refineries with "clean" baselines) to refineries which produced relatively high-emissions gasoline (refineries with "dirty" baselines). These regulations required significant additional reporting by a refinery which transferred more than a certain percentage of its gasoline production. However, individual refinery baselines apply only to that volume of conventional gasoline (CG) production equivalent to the individual refinery's 1990 CG production. Any volume of CG

produced by a refinery greater than its 1990 CG production must meet the average emissions of all gasoline produced in 1990 (the statutory baseline).

Because nearly all refineries currently produce significantly more gasoline than they produced in 1990, a significant portion of every refinery's CG today is produced to meet the statutory baseline. Given this situation, the opportunities to benefit from the transfer of blendstocks based upon differences in individual baselines is significantly decreased. That is, shifting volumes from one refinery to another when both refineries produce more gasoline than they did in 1990 has very little potential to cause any adverse environmental impact. In addition, restrictions placed on refiners by the recent Mobile Source Air Toxics rule makes refineries much less likely to accept high toxics-emissions gasoline blendstocks from other refineries. Thus, this action should make it easier for refiners to transfer gasoline blendstocks without worsening emissions.

Health and Environmental Impacts

The clean air benefits of the RFG program will continue to be realized. The goal of the RFG program is to reduce motor vehicle emissions of the pollutants that contribute to ozone, or smog, and toxic pollutants, such as benzene. Smog is formed when VOCs, NOx, and other pollutants such as CO react in the presence of sunlight. The RFG program sets limits for these pollutants that refiners must meet, regardless of the oxygenate they choose.

The clean air benefits of the RFG program are significant. The reformulated gasoline program reduces smog-forming pollutants by 105,000 tons and toxic pollutants by 24,000 tons annually. This is equivalent to eliminating the pollution from 16 million cars every year.

Gasoline Supply Benefits

This proposed rule should help increase the inventory of RFG at storage terminals during the annual spring transition from winter grade to summer grade RFG. The April 15th date will reduce the market pressure that causes terminals to delay accepting summer grade RFG for as long as possible and encourage terminals to begin turning over their tanks from winter grade RFG to summer grade RFG earlier than they do today. This should lead to greater use of the blend down method to meet the date by which terminals must be in compliance (currently May 1).

The proposed rule should also facilitate the transfer of gasoline blendstocks by eliminating the current blendstock accounting regulations and replacing them with much simpler regulations. This should allow refiners more flexibility to sell gasoline blendstocks and improve refiners' overall ability to produce gasoline.

The RFG program is aimed at reducing pollution in the smoggiest cities in the U.S. Smog threatens millions of Americans each year with respiratory problems, and is particularly dangerous to children, who are increasingly at risk to asthma attacks. In response to recommendations in the President's recent National Energy Policy, EPA has undertaken a study, in consultation with the Departments of Energy and Agriculture, of so-called "boutique fuels", focusing on the various types of fuels, the motivation and causes for states to implement boutique fuels, the impact of these fuels on the fuel production and distribution system, and potential ways to mitigate the impact of disruptions (i.e., refinery fires, pipeline shutdowns) to allow for a more fungible gasoline fuel system. During the course of this study, requirements concerning the "transition" from winter to summer fuels were identified as a concern and EPA listened to issues raised by various groups. As a result of these discussions, EPA developed today's proposal which should provide more flexibility during the transition season.

For Further Information

The proposed rule may be downloaded from our web site at http://www.epa.gov/otaq/rfg.htm

For further information about the proposed rule, contact Chris McKenna at (202) 564-9037.