

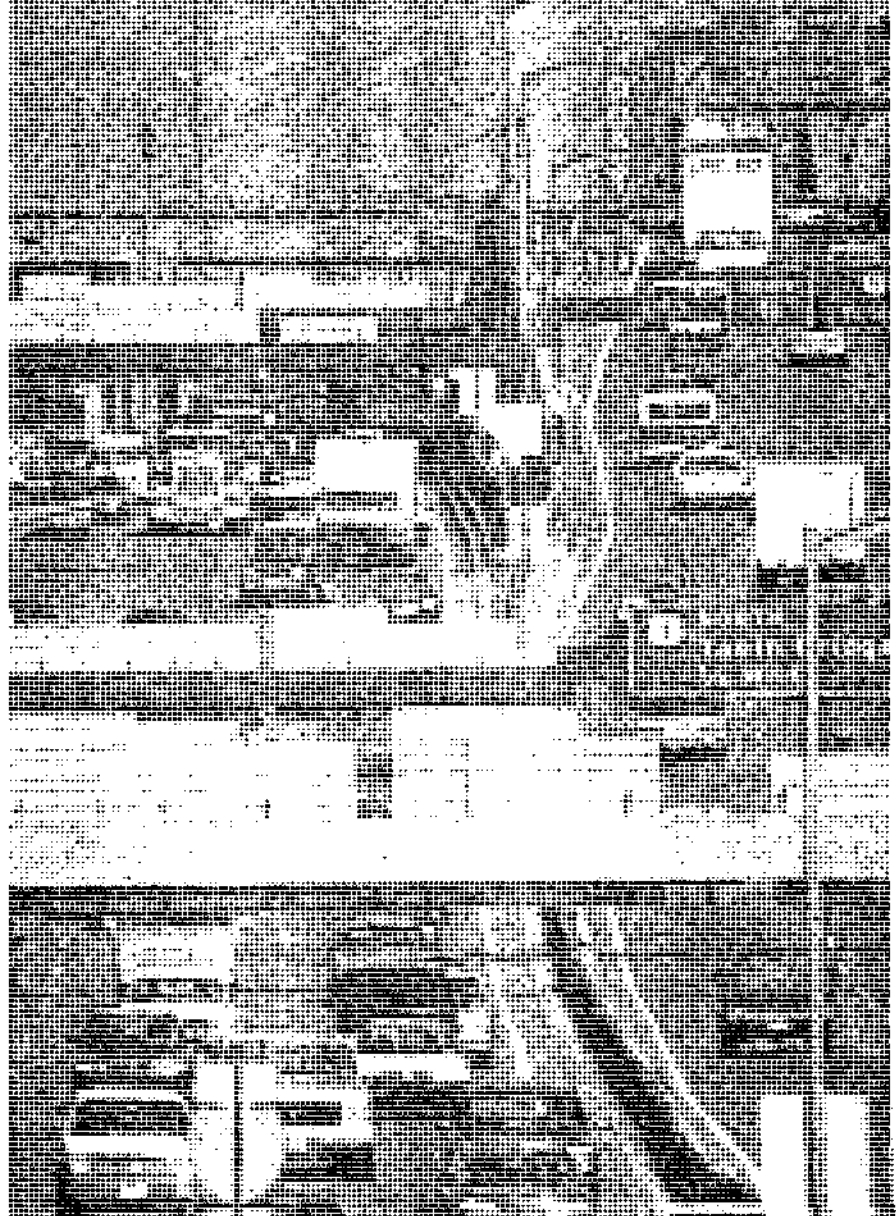
United States
Environmental Protection
Agency

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Air And Radiation

94-001A

EPA Reformulated Gasoline: A Major Step Toward Cleaner Air Better For Your Health And The Environment



IER GASOLINE HAS COME UR PART OF THE COUNTRY

ing no later than January 1, 1995, every time
p your tank with gasoline, you will help
he quality of the air you breathe. By doing
become a part of one of our nation's most
it strategies to reduce pollution from vehicle
s.

live or work in an area with continuing air
problems, you'll find **cleaner, or "refor-**
ed," gasoline at your local service stations.
ulated gasoline is just conventional gasoline
l to burn more cleanly and not evaporate as
he U.S. Environmental Protection Agency has
orking cooperatively with the petroleum and
ustries to make sure this new gasoline fully
he needs of the American motorist. There is
you have to do. Cleaner gasoline is waiting
at the pump.

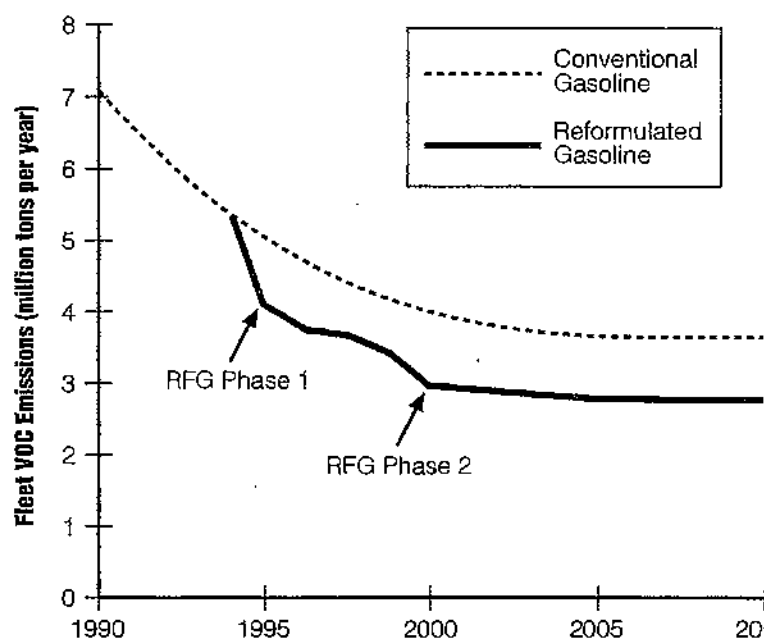
ow that cleaner gas is here, use it in
ealth!

VER GASOLINES PRODUCE VER AIR AND PROTECT HEALTH

er what the brand, or whether it's called
ulated gasoline" or "RFG," the new blend you
protect your health by reducing harmful
emissions of ozone (smog)-forming com-
and air toxics.

ormulated gasoline produces 15 to 17
at less pollution than conventional
ne, and further improvements are
ted as new formulas are developed.
EPA estimates that nearly 1.3 million
f ozone-forming emissions will be
nted in the first phase of the program
(1999) and that reductions will be
greater during the second phase
begins in the year 2000 (see the

**Impact of Reformulated Gasoline on
VOC Emissions**



Just as removing lead from gasoline eliminated t
threat of lead poisoning by the fumes that came fr
automobile tailpipes, cleaner gasoline produces le
of the pollutants that create smog and a variety of
toxics.

This means there will be less smog-forming
ground-level ozone to damage sensitive lung tissue
and make it harder for the lungs to function. When
the noxious ozone level is high, joggers, people
working or exercising outdoors (or indoors with the
windows open), or people with various chronic hea
conditions may suffer symptoms such as chest pai
coughing, and stinging eyes. Ozone exposure is
especially dangerous to children, the elderly, and
people with lung diseases like asthma, bronchitis
and emphysema. Even younger, healthy adults ma
be at risk over the long term, especially if they spe
a lot of time outdoors in an area with high ozone
levels. Smog problems can especially be a proble
in warm-weather months because heat and sunlight
along with auto emissions, contribute to its formati

cs from tailpipe emissions or gasoline so can be harmful. Some of the toxic ds in gasoline (benzene, for one) and ds created when gasoline is burned in the e known or believed to cause cancer. In r vehicles are estimated to account for 0% of all cancers associated with exposure cs. Reformulated gasoline is produced er amounts of benzene than in previous so there is less to get into the air around us.

Reformulated gasoline reduces the total k to the public by reducing exposure to d air toxics.

ENVIRONMENTAL BENEFITS USING CLEANER GASOLINES

he levels affect plant growth and can cause o crops and forests. Reducing the amount -level ozone will help protect those parts of t are important to human survival.

ER GASOLINE AND VEHICLE

fect engine performance?

ated gasoline will have no adverse effects e performance or the durability of engine ystem components, not even for high nce engines. In fact, the nation's major auto urers support — even recommend — the rformulated gasoline. If you travel to a al gasoline area, you can fill up without o your car.

mileage be affected?

mally, if at all. Reformulated gasoline xygenate additives that have been used in nt amount of gasoline since the 1970s. ge is affected mostly by the type of engine le, driving habits, weather conditions, and

vehicle maintenance. Gasolines containing oxygenates may reduce gas mileage by 1 to 2 percent, but changing your driving habits and vehicle maintenance pattern could balance it out.

Will reformulated gasoline affect vehicle warranties?

No. Using it will not affect either the manufacturer's general warranty or the emissions warranty. For information on warranty provisions, see your vehicle owner's manual or consult a local auto dealer.

WHO MUST USE THIS CLEANER GASOLINE?

The Clean Air Act requires use of reformulated gasoline in those parts of the country with the worst ozone air pollution problems. Also, some areas with less serious ozone problems have elected to use it. Others may do so in the future. It is estimated that roughly one-third of all the gasoline used in the United States after January 1, 1995, will be cleaner burning, reformulated gasoline.

Beginning January 1, 1995, reformulated gasoline will be used, state-wide, in **Connecticut, Delaware, Massachusetts, New Jersey, Rhode Island, and the District of Columbia.**

It will also be required in portions of **California, Illinois, Indiana, Kentucky, Maine, Maryland, New Hampshire, New York, Pennsylvania, Texas, Virginia, and Wisconsin.** This includes the following greater metropolitan areas:

**Los Angeles, CA
San Diego, CA
Washington, DC
Chicago, IL
Louisville, KY
Baltimore, MD**

**New York, NY
Pittsburgh, PA
Philadelphia, PA
Dallas - Fort Worth, TX
Houston, TX
Milwaukee, WI**

If you live in the areas listed above, you will automatically get this cleaner gasoline at any gas station you patronize.

IMPORTANT QUESTIONS

How will the reformulated gasoline program affect the cost of gasoline at the pump?

Reformulated gasoline will cost about 5 cents more per gallon to make. How much more is reflected at the pump will vary depending on local and regional market conditions. The industry responds to the new requirements. On average, the increased cost should be about \$20 a year, a small price to pay for cleaner air.

Can I use reformulated gasoline in my lawn and garden equipment?

Some oxygenate additives are used in reformulated gasoline. Certain oxygenates may not be compatible with small lawn and garden equipment, especially older ones. For additional information, ask a local equipment dealer or check the equipment manual.

What is the reformulated gasoline program from the wintertime oxygenated gasoline program?

The wintertime oxygenated fuels program is a wintertime program for areas with carbon monoxide air pollution problems. Reformulated gasoline, on the other hand, is for year-round use to reduce ozone and smog in areas with ozone air pollution problems.

What oxygenates will be added to reformulated gasoline?

Completed testing indicates that these oxygenates, when added at levels that exist in RFG, pose a greater health risk than the gasoline they are replacing. And, as part of the total cleaner gasoline, they help decrease vehicle emissions.

CLEANER GAS AT THE PUMPS — A MAJOR STEP TOWARD CLEANER AIR

The reformulated gasoline program is one of the most important fuels programs to protect us against air pollution since lead was phased-out of gasoline.

Despite improvements in motor vehicle technology over the past 25 years, cars and trucks are still a major source of air pollution in the United States. This is largely because the number of vehicles on the road keeps growing and the number of miles driven has doubled since 1970. This is one reason why more than 90 areas across the country have ozone levels higher than the national public health standards allow.

The Congress provided a comprehensive strategy for reducing motor vehicle pollution in the 1990 Clean Air Act, calling for more stringent vehicle standards and fuel requirements. It also expands vehicle emissions inspection and maintenance programs so vehicles remain clean in actual use, and it encourages transportation planning to limit the growth in vehicle miles driven.

The concept of improving fuel to reduce vehicle emissions is not new. Regulations to limit lead in gasoline took effect starting in the 1970s. These were followed by gasoline volatility (evaporation) controls in the late 1980s. More recently, additives called oxygenates have been added to gasoline to reduce carbon monoxide emissions in the winter and the amount of sulfur in diesel fuel has been reduced to control emissions from diesel vehicles.

Using cleaner gasolines—reformulated gasoline—is the most recent strategy to reduce vehicle emissions through improvements to fuel. The program was developed through intensive negotiations between the EPA, representatives of the oil and automobile industries, state air pollution control officials, gasoline retailers, environmental organizations, and consumer groups. These negotiations ensured that reformulated gasoline is a quality product that meets both the emission reduction requirements of the Clean Air Act, and the needs of consumers, to improve the quality of the air we breathe.
