
Program Update

EPA Upholds Reformulated Gas Requirement in California, New York, and Connecticut

The U.S. Environmental Protection Agency (EPA) is denying requests from California, New York, and Connecticut for a waiver from the oxygen content requirement in reformulated gasoline (RFG).

EPA's Decision

On June 2, 2005, EPA denied requests made by the states of California, Connecticut and New York for a waiver of the oxygen content requirement of the RFG program. The Clean Air Act includes specific guidelines for when EPA may grant a waiver from the Congressional mandate that RFG contain oxygen. States must provide to EPA clear evidence that the oxygen content requirement will prevent or interfere with their ability to meet the National Ambient Air Quality Standards (NAAQS). EPA determined that the petitions submitted by California, Connecticut and New York fail to meet the waiver requirements outlined in the Clean Air Act.

Congress established the RFG program to improve air quality in some of our nation's most polluted urban areas, enhance energy security by extending gasoline supply through the use of oxygenates, and encourage the use of domestically-produced, renewable energy sources. RFG has been used since 1995 and continues to be a highly effective strategy to reduce harmful emissions from motor vehicles that cause ozone, commonly called smog.

The Clean Air Act specifies that RFG contain 2 percent oxygen by weight. The law does not specify which oxygenate must be used and most refiners use either MTBE (methyl tertiary butyl ether) or ethanol. RFG sold in California, New York and Connecticut, however, contains only ethanol, since each state has banned the use of MTBE due to water contamination concerns.

The Administration supports efforts by Congress to remove the oxygen requirement from the RFG program and replace it with a flexible, national renewable fuels program. This legislation would provide California, Connecticut, New York and other RFG areas the relief they are seeking through these waiver requests without compromising the air quality benefits of clean fuel.

California Background

In 1999, the State of California requested a waiver from the oxygen content requirement for RFG in California covered areas. The Agency denied California's original request in 2001, finding that the State had not clearly demonstrated what impact a waiver would have on the NAAQS for ozone.

California contested EPA's 2001 denial, and the Court of Appeals for the Ninth Circuit overturned EPA's decision and instructed the Agency to review the impact of the oxygen content requirement on the State's ability to attain the NAAQS for particulate matter.

In response to concerns over groundwater contamination, California has banned the use of MTBE in gasoline sold in California since January 1, 2004. With the ban in place, refiners supplying California now use ethanol to meet the oxygen requirement of RFG.

EPA reviewed additional information submitted by California. While EPA agrees with California's claim that an oxygen content waiver would lead to a decrease in certain vehicle emissions that contribute to the formation of smog and particulate matter, the Agency concluded that the overall impact on emissions is slight. With a waiver, total volatile organic compounds (VOC) and nitrogen oxide (NO_x) emissions are likely to decrease while carbon monoxide (CO) emissions are likely to increase.

In addition to this analysis, EPA evaluated whether the absence of these emission reductions (i.e., continuation of the oxygenate requirement) would prevent or interfere with the State's ability to attain the ozone and particulate matter standards under the Clean Air Act. EPA evaluated this by looking at whether a waiver would lead to earlier attainment of the NAAQS.

In each of the areas required to use federal RFG in California--San Diego, South Coast, San Joaquin Valley, and Sacramento--the State has either projected attainment with the applicable NAAQS by the approved attainment date, or is developing an emission reduction plan to achieve attainment. In no case has the state relied upon or shown that a waiver of the RFG oxygen content requirement would lead to earlier attainment of the NAAQS. EPA therefore determined that the State has not clearly demonstrated that the oxygen content requirement prevents or interferes with California's ability to attain the NAAQS or prevent attainment by the regulatory deadline.

Because Congress established other goals for the RFG program, EPA also considered the following factors in its decision to deny the State's petition: the relationship between the RFG oxygen content requirement and energy security concerns, and benefits to the rural and agricultural economies. The Agency concluded that California's use of ethanol as an oxygenate contributes to the U.S. goals of reducing dependence on foreign oil and supporting rural and agricultural economies.

Connecticut On September 29, 2004, the Connecticut Department of Environmental Protection (DEP) requested that EPA grant Connecticut a waiver from the oxygen content requirement. RFG is used statewide in Connecticut.

In response to concerns over groundwater contamination, Connecticut has banned the use of MTBE since January 1, 2004. Since that time, refiners supplying Connecticut have used ethanol to meet the oxygen requirement of RFG. Connecticut claimed that the oxygen content requirement causes increased air pollution that interferes with the State's ability to meet the NAAQS for ozone and particulate matter. Specifically, DEP asserted that the use of ethanol increases emissions of NO_x and VOC during the summer ozone season relative to emissions prior to the ban of MTBE in Connecticut State.

EPA is denying Connecticut's waiver request because the State did not submit the technical data necessary for the Agency to determine what impact the waiver would have on emissions and air quality. Without this information, EPA could not evaluate whether the oxygen content requirement prevents or interferes with attainment of the smog or particulate matter standards.

New York On January 6, 2003, New York Department of Environmental Conservation (DEC) requested a waiver from the oxygen content requirement for RFG in the New York City area.

In response to concerns over groundwater contamination, New York has prohibited the use of MTBE in gasoline sold in New York state since January 1, 2004. With the ban in place, refiners supplying New York are now using ethanol to meet the oxygen requirement of RFG. New York has claimed that the oxygen content requirement causes increased air pollution that interferes with the State's ability to meet the NAAQS for ozone. Specifically, DEC has stated that the use of ethanol increases NO_x and VOC emissions, relative to emissions prior to the ban of MTBE in New York State.

In April 2003, EPA notified New York DEC that its submission lacked the necessary technical supporting documentation for EPA to review the request. A subsequent submission by the state did not provide the necessary data.

EPA is denying New York's waiver request because the State did not submit the technical data necessary for the Agency to determine what impact the waiver would have on emissions and air quality. Without this information, EPA could not evaluate whether the oxygen content requirement prevents or interferes with attainment of the smog or particulate matter standards.

New York's RFG area is made up the Counties of Bronx, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, and Westchester.

Health Benefits of Reformulated Gasoline

The RFG program is a highly effective strategy to reduce harmful emissions from motor vehicles that cause ozone, commonly called smog. Smog is formed when VOCs, NO_x, and other pollutants such as CO react in the presence of sunlight. RFG also reduces emissions of toxic air pollutants such as benzene, a known human carcinogen, by about 24,000 tons per year in RFG areas. Today, roughly 75 million Americans are breathing cleaner air because of RFG.

For More Information

You can access documents related to EPA's determination on the Office of Transportation and Air Quality (OTAQ) Web site at:

www.epa.gov/otaq/rfg_regs.htm