

## ORIGIN OF THE REFORMULATED GASOLINE PROGRAM

- The concept of reformulated gasoline (RFG) is not a new one. Gasoline has undergone reformulation along with the evolution of the automobile and the passage of new environmental regulations to air pollution.
- In the late 1980's ARCO Petroleum began successfully marketing RFG in California to help reduce emissions from motor vehicles. Their formula, "EC-1," was formulated specifically for older vehicles as a replacement for leaded gasoline.
- Other petroleum refiners also began marketing their own gasoline reformulations.
- The Clean Air Act legislation President Bush sent to Congress in 1990 included a number of provisions that would have led to the introduction of alternative (non-petroleum) fuels.
- The petroleum and oxygenate industries responded to these provisions by offering the RFG program as a substitute for most of the alternative fuel provisions. They proposed a fuel that would reduce emissions by 15 percent from all vehicles using the gasoline. Their argument, which ultimately succeeded, was that significant fleet turnover would need to occur before emission reductions could be realized from alternative fuels. RFG, on the other hand, would be effective immediately in the existing fleet.
- The final Clean Air Act legislation not only set emission performance requirements for RFG, but it also included a mandate for RFG to contain oxygenates.
- Today's reformulated gasoline grew out of a regulatory negotiation process. After the Clean Air Act was passed, throughout much of 1991, EPA with the petroleum industry, oxygenate industry, state and local organizations, environmental groups, auto manufacturers, organizations representing the public, and other government agencies worked to lay out the framework for the RFG rulemaking.
- EPA continued to work with most of these organizations throughout the development of the rulemaking and beyond to ensure it would be a program acceptable to all interests.

Technical Overview Page 2

• In the meantime, the automobile manufacturers and oil companies voluntarily invested millions of dollars in a joint research program, the "Auto/Oil Air Quality Improvement Research Program," to quantify the emission impacts of changes in the quality of gasoline.

- The results of the Auto/Oil program and numerous other studies conducted by EPA and industry revealed that large emission benefits were indeed possible and cost-effective through RFG. As a result, the emission standards for RFG in the year 2000 go beyond the minimum requirements specified in the Clean Air Act.
- The RFG program was mandated to be implemented only in the nine cities in the country with the worst smog (Los Angeles, San Diego, Chicago, Houston, Milwaukee, Baltimore, Philadelphia, Hartford, and New York City).
- In addition, State Governors requested that many other areas which also have a history of smog problems to be included in the program. EPA expanded the program to cover these areas.