An Overview

What is Reformulated Gasoline?

Reformulated Gasoline is "cleaner-burning" gasoline that will significantly improve air quality by reducing emissions from all gasoline-burning motor vehicles and engines. Cleaner-burning gasoline is required by U.S. Environmental Protection Agency (U.S. EPA) and California Air Resources Board (ARB) regulations to help meet air quality standards.

Beginning January 1, 1995, federal law requires the use of federal cleaner-burning gasoline in the worst polluted areas of the nation, including southern California. Then in March 1996, state law will require the production of even cleaner-burning gasoline. By June 1996, all gasoline sold in the state must be California cleaner-burning gasoline.

Why Do We Need Cleaner-Burning Gasoline?

California has severe air quality problems, and motor vehicles are the largest contributors. Motor vehicles account for about one-half of the emissions of volatile organic compounds (VOCs) and nitrogen oxides (NOx), which contributes to the formation of ground level ozone -- the main ingredient in smog.

What are the Benefits of Cleaner-Burning Gasoline?

Clean Air -- Cleaner-burning gasoline will immediately reduce emissions from all existing on-road gasoline-burning cars and trucks. It will produce the largest emission reductions of any control measure in the last decade. Reductions from on-road vehicular emissions in 1996 are estimated to be:

<table>
<thead>
<tr>
<th>Compound</th>
<th>Reduction</th>
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<tbody>
<tr>
<td>Volatile Organic Compounds</td>
<td>17% (190 tons/day)</td>
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<tr>
<td>Nitrogen Oxides</td>
<td>11% (110 tons/day)</td>
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<tr>
<td>Sulfur Dioxide</td>
<td>80% (30 tons/day)</td>
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<tr>
<td>Carbon Monoxide</td>
<td>11% (1300 tons/day)</td>
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Reduced Cancer Risk -- Cleaner-burning gasoline will also reduce emissions of cancer-causing pollutants. These reductions translate into approximately a 30-40 percent decrease in the potential cancer risk due to gasoline-powered motor vehicles.
More Jobs -- Gasoline producers will need to modify their refineries, creating about 20,000 temporary construction and several hundred permanent jobs.

Cleaner Cars -- Auto manufacturers will use California cleaner-burning gasoline to meet California's stringent low-emission vehicle regulations.

What Makes California Cleaner-Burning Gasoline Different from Current Gasoline? California's cleaner-burning gasoline will pollute less. Because additional refining steps will be required to make this gasoline, California cleaner-burning gasoline will cost more to produce. Gasoline producers must remove or modify components that contribute most significantly to vehicle emissions. The resulting cleaner-burning gasoline may lead to slight reductions (1-3 percent) in vehicle fuel economy.

What is Being Done to Help Ensure a Smooth Transition to California Cleaner-Burning Gasoline? The ARB is working with industry as well as other government agencies to implement a comprehensive gasoline performance testing program. Beginning in early 1995, over 800 motor vehicles will be tested using California cleaner-burning gasoline. The six-month testing program will help ensure that California cleaner-burning gasoline will perform well long before it is sold to consumers. Testing is also planned for lawn and garden equipment, agricultural and construction equipment, and marine engines. Recently, independent researchers completed a two-year test program on delivery vans operating on alternative motor fuels, including California cleaner-burning gasoline. During the study, 21 vans burning California cleaner-burning gasoline were driven about 18,000 miles each. The findings show no fuel-related problems.

California Cleaner-burning Gasoline Fact Sheets are published by the California Air Resources Board in cooperation with the Phase 2 Reformulated Gasoline Public Education Subcommittee. The Subcommittee members include:

- Association of International Automobile Manufacturers, Inc.
- Automobile Club of Southern California
- Automotive Trade Organization of California
- California Air Resources Board
- California Association of Council of Governments
- California Building Industry Association
- California Chamber of Commerce
- California County Superintendents Educational Services Association
California Department of Transportation
California Independent Oil Marketers Association
California Public Utilities Commission
California Renewable Fuels Council
California Service Station and Automotive Repair Association
California State Automobile Association
Chrysler Corporation
Coalition for Clean Air
General Motors Corporation
National Association of Fleet Administrators, Inc.
Natural Resources Defense Council
Parallel Products
Petroleum Marketers Association of America
Texaco Inc.
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