Winston H. Hickox
Agency Secretary

Air Resources Board

CPB

Alan C. Lloyd, Ph.D.
Chairman
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Gray Davis
Governor

February 17, 2000

Mr. Robert Perciasepe
Assistant Administrator for Air and Radiation
United States Environmental Protection Agency
401 "M" Street, S.W. (6101)
Washington, D.C. 20460

Dear Mr. Perciasepe:

Based on recent conversations between our staffs, I would like to provide some additional perspective on the importance of the reductions in emissions of oxides of nitrogen (NOx) that a waiver of the 2 percent minimum oxygen content for gasoline would produce.

As you know, California has some of the most serious air pollution problems in the country. Eight of the ten regions in the nation that most frequently exceed the federal ozone standard are in California. Our State also has ten areas that are nonattaniment for the federal PM10 (fine particulate matter) standard, and four of the nation's five nonattainment areas classified as serious for PM10.

California's State Implementation Plan (SIP), which has been approved by the U.S. EPA, calls for NOx reductions of 40 percent in the Sacramento area, 36 percent in Ventura, and 59 percent in the Los Angeles region, all based on 1990 levels. Similarly, the SIP provisions we have adopted for the PM10 standards call for large reductions in NOx, primarily to reduce the nitrate portion of PM10, which is a substantial component of PM pollution in our worst areas.

For two decades, the ARB and California's air pollution control and air quality management districts (districts) have taken an aggressive approach to the control of NOx emissions. Together, we have adopted the most stringent regulations, rules, guidelines, and determinations in the country. California leads the way in both motor vehicle and stationary source NOx emission controls, and we have implemented all feasible measures to reduce NOx.

However, even with this history, additional NOx reductions are needed from both mobile and stationary sources if we are to attain and maintain standards for ozone and PM10. A waiver from the 2 percent minimum oxygen requirement would provide

an essential portion of these reductions. As we have indicated in prior materials, a substantial amount of gasoline in California will be produced without oxygen if the waiver is granted. Although we cannot precisely quantify the amount of oxygen-free gasoline that will be produced if the waiver is granted, discussions with the State's refiners lead us to believe that it will most likely be between one-half and three-fourths of the summertime gasoline in federal reformulated gasoline areas. Based on these amounts, we believe that the waiver would result in additional NOx reductions of between 8 and 12 tons per day.

To put these reductions in perspective, we developed a table that lists some of the control measures recently adopted by the local districts to reduce NOx emissions. Also listed in the table are regulations that the ARB adopted specifying new emission standards for heavy-diesel vehicles and are considering for urban buses. As can be seen from the table, the reduction in NOx emissions that would result from the waiver is greater than most of the control measures now being implemented to reduce NOx emissions.

I hope this information is helpful to you in considering California's case for the oxygen content waiver. If you have any further questions or wish to discuss the information provided, please contact me at (916) 445-4383 or Mr. Michael H. Scheible, Deputy Executive Officer, at (916) 322-2890.

Sincerely,

Michael H. Scheible

for Michael P. Kenny
Executive Officer

Attachment

cc: Winston H. Hickox
Agency Secretary
Environmental Protection Agency

Alan C. Lloyd, Ph.D.
Chairman
California Air Resources Board

Recent Control Measures for Reducing NOx Emissions

Local District Measures/Rules	Description of Control Measure/Rule	Adoption Date	Implementation Date	Reductions (TPD)
SCAQMD (Rule 1146.2)	Emission Reductions for Small Boilers and Process Heaters	1998	2000-2006	4.2
SCAQMD (CMB-06)	Emission Standards for New Commercial and Residential Water Heaters	1999	2002-2005	7.6
BAAQMD (Regulation # 9-7)	Industrial/Institution/Commercial Boilers & Heaters	1992	1996	20.0
BAAQMD (Regulation #9-8)	Stationary Combustion Engines	1993	1997	4.4
BAAQMD (Regulation #9-9)	Stationary Turbines	1993	1995	4.9
BAAQMD (Regulation #9-12)	Glass Melting Furnaces	1994	1997	0.4
ARB Regulations				
Heavy-Duty Vehicle Regulations	Amendments to Emission Standards For Heavy -Duty Vehicles	1998	2004	3
Phase 3 RFG Regulations	Non-oxygenated Fuel vs. Gasoline containing ethanol (2.0 wt.% oxygen)	1999	2002	33[a], 11[b]
Urban Buses	Emission Standards for New Urban Buses	2000	2004-2007	5.4[c]

a. Based on 2005 statewide NOx emission inventory for onroad and offroad vehicles
b. Based on 2005 South Coast NOx emission inventory for onroad and offroad vehicles
c. Reductions in the Year 2010.
BAAQMD = Bay Area Air Quality Management District
SCAQMD = South Coast Air Quality Management District