State of California
AIR RESOURCES BOARD

Resolution 89-76

November 8, 1989

Agenda Item No.: 89-18-1

WHEREAS, Sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (the "Board") to adopt standards, rules and regulations and to do such acts as may be necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law;

WHEREAS, the Legislature in 1988 enacted the California Clean Air Act of 1988 (Stats. 1988, ch. 1568) to address the problem of air pollution in California;

WHEREAS, in the California Clean Air Act the Legislature declared that attainment of the Board's health-based ambient air quality standards is necessary to protect public health, particularly of children, older people, and those with respiratory diseases, and directed that these standards be attained at the earliest practicable date;

WHEREAS, Section 41712 of the Health and Safety Code directs the Board to adopt regulations to achieve the maximum feasible reduction in reactive organic compounds emitted by consumer products, if the Board determines that adequate data exists for it to adopt the regulations, and if the regulations are technologically and commercially feasible and necessary;

WHEREAS, the California Environmental Quality Act and Board regulations require that no project which may have significant adverse environmental impacts be adopted as originally proposed if feasible alternatives or mitigation measures are available to reduce or eliminate such impacts;

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of Chapter 3.5 (commencing with Section 11340), Part 1, Division 3, Title 2 of the Government Code;

WHEREAS, the Board finds that:

Consumer products represent one of the few remaining emission sources that have not been controlled in order to attain and maintain national and state ambient air quality standards;

Emissions from all forms of consumer products are expected to increase steadily in the future;

Antiperspirants and deodorants are forms of consumer products which contribute to concentrations of ozone and PM_{10} in California;

The national and state ambient air quality standards for these pollutants are violated in California;

Reducing the volatile organic compound content of antiperspirants and deodorants will reduce the ambient concentrations of ozone and PM_{10} in California;

There exists adequate data to adopt the proposed regulations;

The proposed regulations will achieve the maximum feasible reduction in emissions from antiperspirants and deodorants;

The proposed regulations are necessary to attain and maintain the state and national ambient air quality standards and to meet the requirements of the California Clean Air Act;

Antiperspirant and deodorant forms currently exist that comply with the proposed regulations;

The cost-effectiveness ratios for reducing emissions from antiperspirants and deodorants through the proposed volatile organic content limits are within the range of other control measures adopted to reduce emissions of these pollutants;

The proposed regulations are technologically and commercially feasible.

WHEREAS, the Board further finds that:

The proposed regulations will result in a significant reduction in volatile organic compound emissions, and concomitant reductions in ozone and PM_{10} levels, and will encourage manufacturers to develop substitute aerosol propellants which may then be available to reduce the volatile organic compound emissions from other consumer products;

If substitute propellants are developed and used in antiperspirants and deoderants they will not increase the rate of stratospheric ozone depletion because the regulations prohibit the use of any compound that has an ozone depletion potential greater than 0.00;

If substitute propellants are developed and used in antiperspirants and deodorants, these substitute propellants may cause an extremely slight increase in global warming compared to those propellants that are currently used;

Any increase in global warming that may occur as a result of the proposed regulations is so small that it will not constitute a significant adverse impact on the environment;

The Board has determined, pursuant to the requirements of the California Environmental Quality Act and the Board's regulations, that this regulatory action will not have any significant adverse impact on the environment.

The national and state ambient air quality standards for these pollutants are violated in California;

Reducing the volatile organic compound content of antiperspirants and deodorants will reduce the ambient concentrations of ozone and PM_{10} in California;

There exists adequate data to adopt the proposed regulations;

The proposed regulations will achieve the maximum feasible reduction in emissions from antiperspirants and deodorants;

The proposed regulations are necessary to attain and maintain the state and national ambient air quality standards and to meet the requirements of the California Clean Air Act;

Antiperspirant and deodorant forms currently exist that comply with the proposed regulations;

The cost-effectiveness ratios for reducing emissions from antiperspirants and deodorants through the proposed volatile organic content limits are within the range of other control measures adopted to reduce emissions of these pollutants;

The proposed regulations are technologically and commercially feasible.

WHEREAS, the Board further finds that:

The proposed regulations will result in a significant reduction in volatile organic compound emissions, and concomitant reductions in ozone and PM_{10} levels, and will encourage manufacturers to develop substitute aerosol propellants which may then be available to reduce the volatile organic compound emissions from other consumer products;

If substitute propellants are developed and used in antiperspirants and deoderants they will not increase the rate of stratospheric ozone depletion because the regulations prohibit the use of any compound that has an ozone depletion potential greater than 0.00;

If substitute propellants are developed and used in antiperspirants and deodorants, these substitute propellants may cause an extremely slight increase in global warming compared to those propellants that are currently used;

Any increase in global warming that may occur as a result of the proposed regulations is so small that it will not constitute a significant adverse impact on the environment;

The Board has determined, pursuant to the requirements of the California Environmental Quality Act and the Board's regulations, that this regulatory action will not have any significant adverse impact on the environment.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves Sections 94500-94507, Title 17, California Code of Regulations, as set forth in Attachment A hereto.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to adopt Sections 94500-94507, Title 17, California Code of Regulations, after making them available to the public for a period of 15 days, provided that the Executive Officer shall consider such written comments as may be submitted during this period, shall make modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if he determines that this is warranted.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to monitor the progress of antiperspirant and deodorant manufacturers to achieve the standards set forth in the regulations, to provide yearly updates on this progress to the Board, and to return to the Board in 1994 with a status report containing a summary of developments that have occurred and a recommendation as to whether, in light of these developments, the regulation should be amended to expedite the final compliance date for the standards.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to monitor the efforts of antiperspirant and deodorant manufacturers to develop new products which use innovative methods to achieve significant air quality benefits, and to return to the Board if modification of the regulations becomes necessary to permit the use of such innovative products.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to consider the ozone depletion and global warming impacts of all future consumer product regulations, and to insure that, taken as a whole, these regulations reduce pollutant problems in the lower atmosphere while also producing to the maximum extent practicable, a net decrease in ozone depletion and global warming.

I hereby certify that the above is a true and correct copy of Resolution 89-76, as adopted by the Air Resources Board.

Pat Hutchens for

Cary Allison, Board Secretary

State of California
AIR RESOURCES BOARD

Response to Significant Environmental Issues

Item: Notice of Public Hearing to Consider Adoption of Regulations Regarding On-Board Diagnostic System Requirements for 1994 and Later Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles with Feedback Fuel Control Systems

Agenda Item No.: 89-16-1

Public Hearing Date: September 14, 1989

Issuing Authority: Air Resources Board

Comment: No comments were received identifying any significant environmetnal issues pertaining to this istem. The staff report identified no adverse environmental effects.

Response: N/A

Certified: Judith M. Lounsbury
Judith M. Lounsbury
Board Secretary

Date: 7/24/90

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AIR RESOURCES BOARD

Response to Significant Environmental Issues

Item: Public Hearing to Consider Amendments of Regulations to Establish Certification Standards and Test Procedures for New Heavy-Duty Vehicles and Engines Fueled with Compressed Natural Gas or Liquefied Petroleum Gas

Agenda Item No.: 89-17-1

Public Hearing Date: September 15, 1989

Issuing Authority: Air Resources Board

Comment: No comments were received identifying any significant environmental issues pertaining to this item. The staff report identified no adverse environmental effects.

Response: N/A

Certified: Judith M. Lounsbury
Board Secretary

Date: 5/15/90

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Response to Significant Environmental Issues

Item: Public Hearing to Consider the Adoption of a Regulation to Reduce Volatile Organic Compound Emissions from Antiperspirants and Deodorants

Agenda Item No.: 89-18-1

Public Hearing Date: November 8, 1989

Response Date: N/A

Issuing Authority: Air Resources Board

Comment: The Board received comments alleging that certain significant adverse environmental effects could result from the adoption of the proposed regulations. Commenters stated that adoption of the regulations could increase the rate of stratospheric ozone depletion because the regulations would allow the use of substitute aerosol propellants with some ozone depletion potential. Commenters also stated that these substitute propellants could cause an increase in global warming impacts as compared to those propellants that are currently used.

Response: The Board has determined, pursuant to the requirements of the California Environmental Quality Act and the Board's regulations, that this regulatory action will not constitute a significant adverse impact on the environment. In response to public comments, the regulations were modified so that a significant increase in the rate of stratospheric ozone depletion will not result from the use of substitute propellants. The modified regulations prohibit the use in antiperspirants and deodorants of any compound that has an ozone depletion potential greater than 0.00.

With respect to global warming impacts, the regulations would allow hydroflurocarbon compounds (HFCs) to be used as substitute propellants for the currently used hydrocarbon propellants. HFCs are "greenhouse gases" that can contribute to global warming. While HFCs are not currently used in antiperspirants and deodorants, research is presently being conducted to determine if the use of HFCs will be technologically feasible for these products. If industry finds that HFCs are suitable for use as propellants and chooses to use these compounds, it is possible that there may be an extremely slight increase in global warming as a result of this regulation.

However, the Board has determined that any increase in global warming which might occur as a result of this regulatory action is so small that it will not constitute a significant adverse impact on the environment. Even if one makes the unlikely assumption that HFCs will be used as substitutes for all currently used propellants in antiperspirants and deodorants, HFC emissions would be approximately 3 tons a day compared to 100 millions tons a day of carbon dioxide (the gas which is the major contributor to the global warming effect). On a weighted basis which takes into account the fact that HFCs have a greater global warming potential than carbon dioxide, the impact of HFCs would only be approximately 0.03 percent of carbon dioxide's impact.

However, the foregoing calculations do not take into account other mitigating factors which would serve to reduce or eliminate possible global warming impacts from increased HFC use. This regulatory action will result in some reduction in ground level ozone. Since ozone itself is a compound with some global warming potential, the ozone reduction would partially offset any global warming impact from increased use of HFCs. In addition, there are some aerosol consumer products that are still contain chlorofluorocarbon (CFC) propellants. CFCs have as high as 15 times the global warming potential of HFCs, and also cause the depletion of stratospheric ozone. If industry is successful in reformulating aerosols to use HFC compounds as propellants, the use of CFC compounds may be eliminated in those applications where they are still used. As a result of these considerations, the Board therefore believes that the overall global warming impact of this regulation is likely to be either nonexistent or even environmentally positive.

CERTIFIED: Pat Hutchins for
Board Secretary

Date: August 8, 1990