## State of California AIR RESOURCES BOARD

Resolution 78-45

November 13, 1978

WHEREAS, the Air Resources Board is authorized, pursuant to Health and Safety Code Sections 39600, 39601, 43013, and 43101, to adopt regulations governing the composition of motor vehicle fuels as a means of reducing motor vehicle emissions;

WHEREAS, the Western Oil and Gas Association, on behalf of itself and its member companies, has petitioned the Air Resources Board pursuant to Section 11426 of the California Government Code to exercise its authority vested by Section 39601 of the California Health and Safety Code to reconsider and repeal the Board's Resolution 75-33 (adopted June 30, 1975), by which the Board adopted regulations (Section 2252, Title 13, California Administrative Code) limiting the sulfur content of unleaded gasoline sold, offered for sale, or delivered for sale at retail in California after certain dates;

WHEREAS, the Air Resources Board has held a public hearing, in conformity with the requirements of the Administrative Procedure Act, at which testimony was heard on the need for and environmental and economic impacts of limitations on the sulfur content of unleaded gasoline and at which the Air Resources Board considered all known environmental issues associated with such limitations;

WHEREAS, the Air Resources Board has determined that limitation of the sulfur content of unleaded gasoline at 400 parts per million is currently practicable and that limitation at 300 parts per million beginning January 1, 1982 is technologically feasible and economically reasonable;

WHEREAS, the combustion of gasoline causes the release of sulfur in the gasoline either as sulfates or as sulfur dioxide, which is both a pollutant and a precursor of atmospheric sulfates;

WHEREAS, the rate of direct emissions of sulfates and sulfur dioxide from vehicles equipped with exhaust catalysts is directly related to the sulfur content of unleaded gasoline;

WHEREAS, the state 24-hour ambient air quality standard for sulfur dioxide is being violated in California, particularly in the South Coast Air Basin and in Kern County;

WHEREAS, the state 24-hour ambient air quality standard for sulfates is being violated in California, particularly in the South Coast Air Basin, in Kern County, and in the San Diego Air Basin;

WHEREAS, sulfates are a substantial part of total suspended particulates, and sulfates significantly reduce visibility; Resolution 78-45

WHEREAS, both state and national ambient air quality standards for total suspended particulates are exceeded in the South Coast, San Diego, South Central Coast, Sacramento Valley and San Joaquin Valley Air Basins and the state 24-hour standard for total suspended particulates is exceeded in almost all other air basins of the state;

WHEREAS, the state visibility standard is violated in almost all air basins of the state;

WHEREAS, the Air Resources Board has identified a need to limit emissions of sulfur oxides in the San Francisco Bay Area Air Basin;

WHEREAS, the Air Resources Board has determined that limitation of the sulfur content of gasoline burned in California is necessary for achieving and maintaining the aforementioned ambient air quality standards, but that due to the phase-out of leaded gasolines, regulation of the sulfur content of unleaded gasolines only will achieve the necessary degree of control;

WHEREAS, sulfur dioxide is a known poison for noble metal catalysts in general and has been demonstrated in particular to deactivate significantly the hydrocarbon and carbon monoxide oxidation function and the nitric oxide reduction function of some catalyst systems which are expected to be installed on vehicles sold in California;

WHEREAS, preliminary evidence indicates that the aforementioned catalyst deactivation can be minimized by allowing a maximum sulfur content of 300 parts per million in unleaded gasoline;

WHEREAS, delaying the imposition of a 300 parts per million limitation until January 1, 1982 will allow the development and review of more information on the effect of gasoline sulfur content levels on catalyst deactivation;

WHEREAS, delaying the imposition of a 300 parts per million limitation until January 1, 1982 will allow the development and review of more information on costs of compliance at certain refineries;

WHEREAS, the Air Resources Board on October 26, 1978 delegated to the Executive Officer authority to adopt for it a resolution containing the provisions below;

NOW: THEREFORE, BE IT RESOLVED, that the Air Resources Board amends Section 2252 of Title 13 of the California Administrative Code to read as follows:

## 2252 - Sulfur Content

(a) No person shall sell, offer for sale, or deliver for sale at retail in California any unleaded gasoline which has a sulfur content greater than 400 parts per million by weight after November 13, 1978 or greater than 300 parts per million by weight after January 1, 1982. Resolution 78-45

(b) The determination of sulfur contents specified in the foregoing paragraph (a) shall be by American Society for Testing and Materials (ASTM) Test Method D2622-77 (1977 or latest).

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- (c) For the purposes of this section, the term "unleaded gasoline" shall mean gasoline with a lead content no greater than 0.05 gram per gallon as determined by ASTM Test Method D3237-74 (1974 or latest).
- (d) (1) Any person who cannot comply with the requirements set forth in subdivision (a) of this section because of unreasonable economic hardship, unavailability of equipment, or lack of technological feasibility may apply to the Executive Officer of the Air Resources Board for a variance. The application shall set forth:
  - (A) the specific grounds upon which the variance is sought;
  - (B) the proposed date(s) by which compliance with the sulfur content limitations in subdivision (a) will be achieved; and
  - (C) a plan reasonably detailing the method by which compliance will be achieved.
  - (2) Upon receipt of an application for a variance, the Executive Officer shall hold a hearing to determine whether, and under what conditions and to what extent, a variance from the requirements established by subdivision (a) of this section is necessary and will be permitted. Notice of the time and place of the hearing shall be sent to the applicant by certified mail not less than 30 days prior to the hearing. Notice of the hearing shall also be published in at least one newspaper of general circulation and shall be sent to every person who requests such notice, not less than 30 days prior to the hearing.
  - (3) At least 30 days prior to the hearing, the application for the variance shall be made available to the public for inspection. Interested members of the public shall be allowed a reasonable opportunity to testify at the hearing and their testimony shall be considered.
  - (4) No variance shall be granted unless all of the following findings are made:
    - (A) that the applicant for the variance is, or will be, in violation of the requirements established by subdivision
      (a) of this regulation;
    - (B) that, due to unreasonable economic hardship, unavailability of equipment, or lack of technological feasibility beyond the reasonable control of the applicant, requiring compliance would result in either:

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- (i) an arbitrary or unreasonable taking of property; or
- (ii) the practical closing and elimination of a lawful business; and
- (C) that such taking or closing would be without a corresponding benefit in reducing air contaminants.
- (5) Any variance order shall include the date(s) by which compliance with the sulfur content limitations in subdivision (a) will be achieved and any other appropriate condition(s) including, where desirable, increments of progress, that the Executive Officer, as a result of the testimony received at the hearing, finds necessary.
- (6) If the Executive Officer determines that, due to conditions beyond the reasonable control of the applicant, the applicant needs an immediate variance from the requirements established by subdivision (a) of this section, the Executive Officer may hold a hearing without complying with the provisions of subdivision (d)(2) or subdivision (d)(3) above. No variance granted under the provisions of this paragraph may extend for a period of more than 45 days. The Executive Officer shall maintain a list of persons who in writing have informed the Executive Officer of their desire to be notified by telephone in advance of any hearing held pursuant to this subdivision, and shall provide advance telephone notice to any such person.
- (7) Upon the application of any person, the Executive Officer may review and for good cause modify or revoke a variance from the requirements of subdivision (a) after holding a hearing in accordance with the provisions of this subdivision.

I certify that the above is a true and correct copy of Resolution 78-45 as passed by the Air Resources Board. Oew Joan Gilpin Board Secretary