

State of California  
AIR RESOURCES BOARD

1976 Resolutions -1-

RESOLUTIONS

No.	Item	Staff	Hearing Scheduled	Date Adopted	+ EIS to Resources
76-1	Motorcycle Emissions Sta. & Test Proc.		12/30/76		
76-2	Air quality Std. for Lead		1/2/76		
76-3	Lead Contend Regulation	Jack Pashued	1/2/76		
76-4	Research Control 7-438-27a				
76-5	Certification of Vapor Reserve Systems		3/30/76		
76-6	Culfuatin Procedure for New Vehicle				
76-7	Assembly Line Test Regs				
76-8	Sulfate Std.				
76-9	AIHL-510-34 -\$95,058	Research			
76-10					
76-11	Sulfate Standard				
76-12	Reactivity Table				
76-13	Visibility Reg. Tahoe		3/2/76		
76-14	Co. Std. Tahoe		3/2/76		
76-15	(1971) M.V. Fuel Evaporative Emission Standards	McClemder	3/11/76		
76-16	Approved Regs for 1978 L.D. trucks & HD	Eugnees	3/12/76		

State of California  
AIR RESOURCES BOARD

1976 Resolutions -2-

RESOLUTIONS

No.	Item	Staff	Hearing Scheduled	Date Adopted	+ EIS to Resources
76-17	Control of H.C. Emission SCAB Research KVG -\$499,880		3/23/76		
<del>76</del> -18	Resolution to take over District SCAPCD Rule 473				
76-19	78 Pass car Std.	Gary Rubenstein	4/7/76		
76-20	Emergency Plan	Bob Adrian	4/27/76		
76-21	C.I. Technology \$84,700	Laura Storey Research	5/11/76		
76-22	Conflict fo Interest Code-	Kingsley	5/18/76		
76-23	Cal Tech -\$125,580	Research	5/19/76		
76-24	Rule 463 Scared	Morgesten	6/3/76		
76-25	New Vehicle Enforcement Regulations	Hostah	6/15/76		
76-26	Systems Applications	Research	6/15/76		
76-27	MRI		6/15/76		
76-28	Dept. of Health		6/15/76		
76-29	Change SCAB Boundary		6/25/76		
76-30	El Monte-A.L. Test Procedures	Paula			
76-31	Auxilliary Fuel Tank Reg.		7/27/76		
76-32	TRW Research -\$245,894	Laura	7/14/76		

State of California  
AIR RESOURCES BOARD

1976 Resolution -3-

RESOLUTIONS

No.	Item	Staff	Hearing Scheduled	Date Adopted	+ EIS to Resources
76-33	Emergency Plan 7/15/76				
76-34	S02 Regulations Proposed for SCAB				
76-35	Proposed BAACP Rule & Reg. Amendment	NSR			
76-36	Conflict of Interest				
76-37	Evaporation Emission Standards				
76-38	Heavy Duty Standards Change				
76-39	New Source				
76-40	Stationary Source Plan	Gnuezneg			
76-41	Open Burning Dumps		11/10/76		
76-42	Agr. Burning Guidelines		11/12/76		
76-43	Vehicle Maintenance		11/12/76		
76-44	Vehicle Exhaust		11/12/76		
76-45	Evap. Stds.		11/12/76		
76-46	Contract for UCR -\$135,981		11/19/76		
76-47	-\$140,769-				
76-48	AIHL Dept. of Health -\$34,405				

## RESOLUTIONS

[illegible]



State of California

AIR RESOURCES BOARD

January 15, 1976

WHEREAS, Ernest S. Starkman met an untimely death January 13 at the age of 56 years; and

WHEREAS, Mr. Starkman was widely acclaimed as an outstanding leader in the field of automotive pollution control; and

WHEREAS, Mr. Starkman did pioneering work in automotive emissions engineering as a member of the faculty of University of California at Berkeley for two decades, as chairman of the Thermal Systems Division of the College of Engineering of the University, and as assistant vice president for the statewide University system; and

WHEREAS, Mr. Starkman continued to serve the people of California as Professor Emeritus in the Department of Mechanical Engineering at the University of California, Berkeley campus, from April 1, 1971 to the time of his death; and

WHEREAS, Mr. Starkman was vice president in charge of the Environmental Activities Staff at General Motors at the time of his death; and

WHEREAS, Mr. Starkman joined General Motors on April 1, 1971, at the time of the creation of the Environmental Activities Staff and as its vice president encouraged a spirit of cooperation between the automotive industry and regulatory agencies; and

WHEREAS, Mr. Starkman was one of the leading forces in accomplishing distinguished work in meeting California's air pollution requirements; and

WHEREAS, Mr. Starkman was the author of more than 100 technical papers on engine fuels, lubricants and combustion, and received the Society of Automotive Engineers' Horning Award and Medal in 1959 and the Colwell Award in 1968 for presentations relating to engine combustion; and

WHEREAS, Mr. Starkman recently served on the White House Task Force on Air Pollution and the Office of Science and Technology Ad Hoc Panel on Unconventional Automotive Vehicle Propulsion; and

WHEREAS, Mr. Starkman was chairman of the Advisory Committee on Advanced Power Systems to the Council of Environmental Quality; and

WHEREAS, Mr. Starkman provided a unique and valued service to the people of the State of California and the Air Resources Board in particular as Chairman of the Technical Advisory Committee of the Air Resources Board from February, 1968, to February, 1971;

NOW, THEREFORE, BE IT RESOLVED, the California Air Resources Board hereby recognizes and memorializes the achievements, creative abilities, dedication to environmental concerns and spirit of cooperation of Ernest S. Starkman; and

BE IT FUTHER RESOLVED, that a copy of this resolution be transmitted to his widow, Marjory Starkman, at her home at Bloomfield Hills, Michigan.

State of California

AIR RESOURCES BOARD

February 21, 1976

WHEREAS, Robert Sawyer will leave the Air Resources Board at the end of February, 1976; and

WHEREAS, Dr. Sawyer has served as a member of the Air Resources Board since January, 1975; and

WHEREAS, during his tenure as a Board member, Dr. Sawyer was instrumental in establishing environmentally progressive and technologically sound emission standards and test procedures for automobiles, trucks, and motorcycles; and

WHEREAS, Dr. Sawyer's role in the Air Resources Board's review and adoption of air quality standards and the development of an Air Conservation Program exemplify his extraordinary combination of intellectual honesty, professional diligence and dedication to the purposes for which the Air Resources Board was established; and

WHEREAS, working with Dr. Sawyer in the past year has been a personal pleasure because of his patience, humor, and enthusiasm;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board deeply regrets that Robert Sawyer has determined that his responsibilities as Professor of Mechanical Engineering at the University of California preclude his continuing as a member of the Board; and

BE IT FURTHER RESOLVED, the Air Resources Board looks forward to the continuing assistance of Robert Sawyer as critic, consultant and friend in the struggle to achieve and maintain healthful air for the people of California.

State of California  
AIR RESOURCES BOARD

Resolution 76-1

February 20, 1976

WHEREAS, Sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board to adopt rules and regulations in accordance with the provisions of the Administrative Procedure Act of the Government Code;

WHEREAS, the Board has adopted emissions standards for motorcycles in accordance with Section 43107 (a) of the Health and Safety Code;

WHEREAS, changes in the present exhaust emission standards and test procedures are necessary to clarify the certification durability test requirements and allowable maintenance and to make the regulations as consistent as possible with proposed Federal EPA regulations;

WHEREAS, a public hearing and other proceedings have been held in accordance with the provisions of the Administrative Procedure Act (Government Code, Title 2, Division 3, Part 1, Chapter 4.5);

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby amends the second paragraph of Section 1958, Article 2, Subchapter 1, Chapter 3, Title 13 of the California Administrative Code to read in its entirety as follows:

The test procedures for determining compliance with these standards are set forth in the "California Exhaust Emission Standards and Test Procedures for 1978 and Subsequent Production Motorcycles", adopted by the Air Resources Board July 15, 1975, as amended February 20, 1976.

BE IT FURTHER RESOLVED, that the "California Exhaust Emission Standards and Test Procedures for 1978 and Subsequent Production Motorcycles", dated February 20, 1976, are hereby adopted.

State of California

AIR RESOURCES BOARD

RESOLUTION 76-2

January 15, 1976

WHEREAS, the Air Resources Board, pursuant to Section 39606 of the Health and Safety Code, has the authority, after holding a public hearing, to adopt standards of ambient air quality;

WHEREAS, the Board held a public hearing, pursuant to the Administrative Procedure Act, to reconsider the California ambient air quality standard for lead on November 3 and 4, 1975;

WHEREAS, the State Department of Health and its Air Quality Advisory Committee have recommended retention of the concentration and averaging period provisions of the present California ambient air quality standard for lead and have also recommended changing the method and most relevant effects provisions of the standard as follows:

METHOD: AIHL Method No. 54.

MOST RELEVANT EFFECTS: Increased body burden, impairment of blood formation and nerve conduction.

WHEREAS, the Board finds that there is substantial evidence of adverse health effects attributable to particulate lead in the atmosphere at concentrations above 1.5 micrograms per cubic meter, 30-day average;

NOW, THEREFORE, BE IT RESOLVED, that the Board reaffirms the concentration and averaging period for lead particulate, 1.5 micrograms per cubic meter, 30-day average, as stated in Section 70200, Title 17, California Administrative Code; and amends the lead standard in said Section as follows:

METHOD: High-volume-sampling, dithizone-method  
AIHL Method No. 54, or equivalent

MOST RELEVANT EFFECTS: Possible-inhibition-of-d-ALA-dehydrase-which-is  
used-in-heme-synthesis  
Increased body burden, impairment of blood  
formation and nerve conduction.

COMMENTS: With-exposure-to-2- $\mu\text{g}/\text{m}^3$ -or-above-as-a-30-day  
average, increased-storage-of-lead-will-produce  
detectable-metabolic-effects.

State of California

AIR RESOURCES BOARD

Resolution 76-3

February 19, 1976

WHEREAS, the Air Resources Board, pursuant to Sections 39061 and 43013 of the Health and Safety Code, has the authority to adopt vehicle emission standards for pollutants other than hydrocarbons, carbon monoxide, and oxides of nitrogen;

WHEREAS, the California Supreme Court in *Western Oil and Gas Association vs. Orange County Air Pollution Control District*, decided May 23, 1975, ruled that the Board has the authority to regulate fuel content, including lead content, pursuant to the aforesaid provisions;

WHEREAS, the California ambient air quality standard for lead is exceeded by a wide margin in most urban areas of the State, and most of the lead in the ambient air comes from lead additives in gasoline; and

WHEREAS, the Board has held a public hearing pursuant to the California Administrative Procedure Act;

NOW, THEREFORE, BE IT RESOLVED, that the Board adopts Section 2253 in Title 13 of the California Administrative Code, regulating the lead content of gasoline to be sold in California as follows:

2253. Lead Content. (a) In the manufacture of gasoline to be sold, offered for sale, or delivered for sale at retail in California, no gasoline refiner shall exceed the average lead content per gallon specified below for each 3-month period (January-March, April-June, July-September, October-December):

<u>Effective Date of Limitation</u>	<u>Maximum Lead Content (Grams Per Gallon)</u>
January 1, 1977	1.4
January 1, 1978	1.0
January 1, 1979	0.7
January 1, 1980	0.4

- (b) The provisions of paragraph (a) of this section shall not be applicable to any refiner with a gasoline production capacity of less than 20,000 barrels per day. In the manufacture of gasoline to be sold, offered for sale, or delivered for sale at retail in California, such refiners shall not exceed the average lead content per gallon specified below for each 3-month period (January-March, April-June, July-September, October-December):

<u>Effective Date of Limitation</u>	<u>Maximum Lead Content (Grams Per Gallon)</u>
January 1, 1979	1.7
January 1, 1980	1.4

- (c) For each 3-month period (January-March, April-June, July-September, October-December) the average lead content per gallon shall be computed by dividing total grams of lead used at a refinery in the manufacture of gasoline by total gallons of gasoline manufactured at such refinery. Appropriate adjustments shall be made for exports and imports of gasoline.

(d) For each 3-month period (January-March, April-June, July-September, October-December) commencing with the period January 1, 1977 through March 31, 1977, each refiner shall submit to the Executive Officer of the Air Resources Board a report showing for each refinery (i) the total grams of lead in lead additive inventory on the first day of the period, (ii) the total grams of lead received during the period, (iii) the total grams of lead in lead additive inventory on the last day of the period, (iv) the total gallons of gasoline produced by such refinery during the period, (v) the average lead content in each gallon of gasoline produced during the period, and (vi) such other information, including data on gasoline imported to or exported from the State, as may be required by the Board to ascertain the lead content of gasoline to be sold, offered for sale, or delivered for sale at retail in California. Reports shall be submitted within 30 days after the close of the reporting period, on forms supplied by the Executive Officer of the Air Resources Board upon request. Such reports shall be subject to audit, upon request by the Air Resources Board.

(e) For each 3-month period (January-March, April-June, July-September, October-December) commencing with the period January 1, 1977 through March 31, 1977, each lead additive manufacturer shall submit to the Executive Officer of the Air Resources Board a report showing the total grams of lead shipped to each refinery by such lead additive manufacturer during the period. Reports shall be submitted within 30 days after the close of the reporting period, on forms supplied by the Executive Officer of the Air Resources Board upon request.

(f) (1) Any refiner who cannot comply with the requirements set forth in subdivisions (a) or (b) 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 lead content limitations in subdivision (a) or (b) 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) or (b) 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) or (b) 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 (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 lead content limitations in subdivision (a) or (b) will be achieved and any other condition(s) including, where appropriate, increments of progress, that the Executive Officer of the Air Resources Board, 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) or (b) of this section, the Executive Officer may hold a hearing without complying with the provisions of subdivision (f) (2) or subdivision (f) (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 of the Air Resources Board may review and for good cause modify or revoke a variance from the requirements of subdivision (a) or (b) after holding a hearing in accordance with the provisions of this subdivision.
- (8) Information obtained by the Executive Officer of the Air Resources Board or his representatives pursuant to this part shall be treated, insofar as its confidentiality is concerned, in accordance with the provisions of Part III, Chapter 1, Subchapter 4, Title 17, California Administrative Code (Sections 90500-91022).

**State of California**

**AIR RESOURCES BOARD**

**Resolution 76-4**

**February 20, 1976**

WHEREAS, an unsolicited research proposal No. 7-438-27a entitled "Health Effects of Ozone in Individuals with Chronic Pulmonary Disease" has been submitted to the Air Resources Board;

WHEREAS, the Research Screening Committee has evaluated this proposal; and

WHEREAS, the Screening Committee has recommended for funding the proposal:

ARB Proposal Number 7-438-27a entitled "Health Effects of Ozone in Individuals with Chronic Pulmonary Disease", submitted by the Professional Staff Association of the Rancho Los Amigos Hospital, Inc. for an amount not to exceed \$119,878;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board accepts the recommendation of the Research Screening Committee and approves the proposal:

ARB Proposal Number 7-438-27a entitled "Health Effects of Ozone in Individuals with Chronic Pulmonary Disease", submitted by the Professional Staff Association of the Rancho Los Amigos Hospital, Inc. for an amount not to exceed \$119,878;

and authorizes the Executive Officer to initiate administrative procedures and to execute all necessary documents and contracts for the research effort proposed in an amount not to exceed \$119,878.

State of California

AIR RESOURCES BOARD

Resolution 76-5

March 30, 1976

WHEREAS, Section 39607(d) of the Health and Safety Code authorizes the Air Resources Board to adopt test procedures to measure compliance with non-vehicular emission standards;

WHEREAS, Section 39601 of the Health and Safety Code authorizes the Air Resources Board to implement, interpret, or make specific Section 39068.6;

WHEREAS, Section 39068.6 of the Health and Safety Code (as added by Chapter 1042, Statutes of 1975) authorizes the Air Resources Board to adopt procedures for the certification of, and to certify, gasoline vapor control systems in compliance with standards adopted by the Board;

WHEREAS, A public hearing and other proceedings have been held in accordance with the provisions of the Administrative Procedure Act (Government Code, Title 2, Division 3, Part I, Chapter 4.5);

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby amends and adds to its regulations in Chapter 1, Subchapter 8, of Title 17, California Administrative Code as follows:

Amend Section 94000 to read as follows:

94000. Vapor Recovery Systems - The test procedures for determining compliance with emission standards for gasoline vapors displaced during the fueling of underground storage tanks and vehicles shall be as set forth in "Test Procedures for Determining the Efficiency of Gasoline Vapor Recovery Systems at Service Stations" adopted on December 9, 1975, amended March 30, 1976.

Add a new section to read as follows:

94001. Certification of Vapor Recovery Systems - The certification of gasoline vapor recovery systems at service stations shall be accomplished in accordance with the Air Resources Board's "Certification Procedures for Gasoline Vapor Recovery Systems at Service Stations" adopted on March 30, 1976.

BE IT FURTHER RESOLVED, that the "Certification Procedures for Gasoline Vapor Recovery Systems at Service Stations" dated March 30, 1976, and as amended by the Board during the March 30, 1976 Public Hearing by deleting from Section V.C. the sentences:

"Another exception shall be for those components supplied to the manufacturer by a third party. Those components shall be warranted to the extent of the original manufacturer's warranty."

are hereby adopted; and

BE IT FURTHER RESOLVED, that the "Test Procedures for Determining the Efficiency of Gasoline Vapor Recovery Systems at Service Stations" adopted December 9, 1975 be amended as shown in Exhibit II to the Air Resources Board Staff Report 76-5-2, March 30, 1976, and as amended by the Board during the March 30, 1976 Public Hearing by adding to Section 1.0 the sentence:

"Any systems which the Executive Officer determines increases the quantity of liquid lost through spitbacks over that quantity typical of non-vapor recovery systems will be disapproved."

and by replacing in the numerator of the equation in Section 2.4(b) the term "29.92" with the term " $P_b$ ".

State of California  
AIR RESOURCES BOARD

Resolution 76-6

February 20, 1976

WHEREAS, Section 39601 of the Health and Safety Code authorizes the Air Resources Board to adopt rules and regulations in accordance with the provisions of the Administrative Procedure Act of the Government Code;

WHEREAS, Section 43104 of the Health and Safety Code authorizes the Air Resources Board to adopt, by regulation, certification test procedures for determining compliance with applicable new vehicle emission standards;

WHEREAS, the Air Resources Board has adopted emission standards for 1977 model-year passenger cars;

WHEREAS, the Board has determined that there is sufficient information available to apply a methane content correction factor to the total exhaust hydrocarbon concentrations for oxidation catalyst equipped passenger cars without reducing the desired control level of hydrocarbons; and

WHEREAS, a public hearing and other proceedings have been held in accordance with the provisions of the Administrative Procedure Act (Government Code, Title 2, Division 3, Part 1, Chapter 4.5);

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby amends the third paragraph of Section 1955.1, Article 2, Subchapter 1, Chapter 3 of Title 12, California Administrative Code to read in its entirety as follows:

The test procedures for determining compliance with these standards are set forth in "California Exhaust Emission Standards and Test Procedures for 1975 and Subsequent Model Gasoline-Powered Passenger Cars and Light-Duty Trucks", adopted by the Air Resources Board February 19, 1975, as amended March 17, 1975, April 16, 1975 and February 20, 1976.

BE IT FURTHER RESOLVED, that the "California Exhaust Emission Standards and Test Procedures for 1975 and Subsequent Model Gasoline-Powered Passenger Cars and Light-Duty Trucks", as amended February 20, 1976, are adopted.

State of California  
AIR RESOURCES BOARD

Resolution No. 76-7

February 20, 1976

WHEREAS, Sections 39601 and 43210 of the Health and Safety Code authorize the Air Resources Board by regulation to adopt test procedures applicable to motor vehicles manufactured for sale in this state;

WHEREAS, the present assembly-line or predelivery test procedures for 1976 and subsequent model year gasoline powered passenger cars and light duty trucks contain quality audit test provisions, reporting procedures and window decal requirements that are not appropriate for 1977 model year vehicles; and

WHEREAS, a public hearing and other proceedings have been held in accordance with the provisions of the Administrative Procedure Act (Government Code, Title 2, Division 3, Part I, Chapter 4.5);

NOW, THEREFORE, BE IT RESOLVED, that Section 2055 of Article 1, Subchapter 2, Chapter 3, Title 13, California Administrative Code, be adopted as follows:

2055. Assembly-Line or Pre-Delivery Test Procedure --  
1977 and Subsequent Model-Year Gasoline-Powered  
Passenger Cars and Light-Duty Trucks

New 1977 and subsequent model-year gasoline-powered passenger cars and light-duty trucks shall be assembly-line tested in compliance with the Air Resources Board's "California Assembly-Line Test Procedures for 1977 and Subsequent Model-Year Gasoline-Powered Passenger Cars and Light-Duty Trucks", adopted February 20, 1976.

BE IT FURTHER RESOLVED, that the "California Assembly-Line Test Procedures for 1977 and Subsequent Model-Year Gasoline-Powered Passenger Cars and Light-Duty Trucks", dated February 20, 1976, are hereby adopted;

BE IT FURTHER RESOLVED, that Section 2054 of Title 13, which presently applies to 1976 and subsequent model years, together with the test procedures incorporated therein, is amended to limit its application to the 1976 model year, only, as shown in Appendix III of staff report No. 76-4-3, dated February 20, 1976, titled "Public Hearing - Amendments to the Assembly-Line Test Procedure Regulations for 1977 and Subsequent Model Year Passenger Cars and Light Duty Trucks".

BE IT FURTHER RESOLVED, that Sections 2106, 2107, and 2108 of Title 13 are amended and Section 2110 of Title 13 is adopted as shown in Appendix II of staff report No. 76-4-3, dated February 20, 1976, titled "Public Hearing - Amendments to the Assembly-Line Test Procedure Regulations for 1977 and Subsequent Model Year Passenger Cars and Light Duty Trucks".

State of California

AIR RESOURCES BOARD

California Assembly-Line Test Procedures for 1977 and  
~~Subsequent~~ Model-Year Gasoline-Powered Passenger Cars  
and Light-Duty Trucks

Adopted February 20, 1976

A. General Provisions

These test procedures, adopted pursuant to Section ~~39052~~ 43210 of the California Health and Safety Code, specify the exhaust emissions quality control and audit testing and reporting requirements for manufacturers of gasoline-powered passenger cars and light-duty trucks to be sold and registered in the State of California. These procedures ~~adopted-December 11, 1974~~ shall become effective with the start of production of the ~~1976~~ 1977 model-year vehicles.

The procedures specify two types of tests: (1) A short inspection test to be applied to every vehicle before sale, and (2) A quality audit test according to the Official Exhaust Emission Test Procedures for the model year in production. A vehicle is in compliance with the assembly-line standards and test procedures when that vehicle is in compliance with the short inspection test requirements and that vehicle's engine family is in compliance with the quality audit test requirements. Since quality audit evaluations occur less frequently than the short inspection tests, a vehicle which passes the short inspection test may be presumed to be in compliance with the full assembly-line procedures pending the quality audit evaluation of that vehicle's engine family. The vehicle engine shall be adjusted to the manufacturer's specifications for delivery to customer prior to emissions testing. A steady state inspection test must be performed on all vehicles. The distribution of the total quarterly production for each family or subfamily by type test is:



## California Assembly-Line Test Procedures

Quality Audit	Inspection Test	
Official Approval Test	Steady State	Functional
At least 2.0%	All vehicles	All vehicles

A vehicle which fails any assembly-line inspection test may be retested or repaired and if on retest it passes each test by which it was rejected, it may be sold without penalty.

For vehicles manufactured during the first calendar quarter of model production and not to exceed 30 calendar days thereafter, the exhaust emissions shown on a window decal shall be the highest values from the engine family emission data fleet. Not more than one month after the first and each succeeding calendar quarter of production, the exhaust emissions shown on a window decal shall be the average quality audit values for the engine family of the previous calendar quarter of production. During the second calendar quarter, however, the manufacturer may continue using the decal showing the highest values from the engine family emission data fleet, if the first calendar quarter is a short production period (less than a full calendar quarter). Each vehicle emission decal shall have the following statement displayed thereon:

"This vehicle has been tested under and conforms to California  
Assembly-Line Test Requirements."

Additionally, the hydrocarbon (HC) and carbon monoxide (CO) concentrations determined by the steady state inspection test for each vehicle shall be displayed on a window decal along with the applicable control limits for that

## California Assembly-Line Test Procedures

Quality Audit	Inspection Test	
Official Approval Test	Steady State	Functional
At least 2.0%	All vehicles	All vehicles

A vehicle which fails any assembly-line inspection test may be retested or repaired and if on retest it passes each test by which it was rejected, it may be sold without penalty.

For vehicles manufactured during the first calendar quarter of model production and not to exceed 30 calendar days thereafter, the exhaust emissions shown on a window decal shall be the highest values from the engine family emission data fleet. Not more than one month after the first and each succeeding calendar quarter of production, the exhaust emissions shown on a window decal shall be the average quality audit values for the engine family of the previous calendar quarter of production. During the second calendar quarter, however, the manufacturer may continue using the decal showing the highest values from the engine family emission data fleet, if the first calendar quarter is a short production period (less than a full calendar quarter). Each vehicle emission decal shall have the following statement displayed thereon:

"This vehicle has been tested under and conforms to California  
Assembly-Line Test Requirements."

Additionally, the hydrocarbon (HC) and carbon monoxide (CO) concentrations determined by the steady state inspection test for each vehicle shall be displayed on a window decal along with the applicable control limits for that

## California Assembly-Line Test Procedures

vehicle's-engine family or subfamily. For those vehicles tested to establish temporary control limit values, the applicable control limits shall be the steady state emission values determined for those vehicles.

Air Resources Board personnel and mobile laboratories shall have access to vehicle assembly plants, ~~or~~ distribution facilities and test facilities for the purpose of vehicle selection, testing and observation.

The frequency of access shall be proportional among manufacturers in relation to California vehicle sales, as far as practical. Scheduling of access shall be arranged with the designated manufacturer's representative plant, facility-manager, or-dealership and shall not unreasonably disturb normal operations.

Variations from these procedures which produce substantially equivalent results may be authorized by the Executive Officer. In extraordinary circumstances where compliance with these procedures cannot be fulfilled, a manufacturer may appeal to the Air Resources Board for a temporary exception.

### B. Assembly-Line Inspection Test Procedures

#### 1. Applicability

These test procedures are applicable to all manufacturers of gasoline-powered passenger cars and light-duty trucks having an engine displacement greater than 50 cubic inches.

The Executive Officer may approve determination of control limits by subfamilies, e.g., different carburetors, assembly-plants, engine displacement, control systems, transmissions, and inertia weights.

## California Assembly-Line Test Procedures

### 2. Emission Standards

Any vehicle tested by the steady state inspection test showing emissions less than the control limit established for its engine family or subfamily and which passes its appropriate functional tests will be considered as-meeting-the-emission-standards to be in compliance with the short inspection test requirements. The control limit for each engine family or subfamily at the start of a model year will be determined as follows:

- (a) Measure the emissions from the first 100 vehicles of each engine family or subfamily tested by the steady state assembly-line inspection test.
- (b) Determine mean emission level and standard deviation for each component (HC and CO).
- (c) Determine the sum of the mean plus two times the standard deviation.
- (d) The values found in Step (c) will be the emission level of the control limit.
- (e) Until the first control limits are established, the manufacturer shall use temporary control limits based on the first ten tests. These ten vehicles are deemed to meet the control limits so established.
- (f) 1. For control systems that do not use catalytic converters or for control systems that use catalytic converters without air injection - If the HC control limit value

2. Emission Standards

Any vehicle tested by the steady state inspection test showing emissions less than the control limit established for its engine family or subfamily and which passes its appropriate functional tests will be considered as-meeting-the-emission-standards to be in compliance with the short inspection test requirements. The control limit for each engine family or subfamily at the start of a model year will be determined as follows:

- (a) Measure the emissions from the first 100 vehicles of each engine family or subfamily tested by the steady state assembly-line inspection test.
- (b) Determine mean emission level and standard deviation for each component (HC and CO).
- (c) Determine the sum of the mean plus two times the standard deviation.
- (d) The values found in Step (c) will be the emission level of the control limit.
- (e) Until the first control limits are established, the manufacturer shall use temporary control limits based on the first ten tests. These ten vehicles are deemed to meet the control limits so established.
- (f) 1. For control systems that do not use catalytic converters or for control systems that use catalytic converters without air injection - If the HC control limit value

## California Assembly-Line Test Procedures

determined in Step (c) for the steady state idle inspection test is less than 150 ppm, the HC control limit value may be increased by up to 50 ppm but may not exceed 150 ppm. If the Step (c) control limit for CO is less than 1.0 percent, the CO control limit may be increased by up to 0.5 percent but may not exceed 1.0 percent.

2. For control systems that use catalytic converters with air injection - If the HC control limit value determined in Step (c) for the steady state idle inspection test is less than 75 ppm, the control limit value may be increased by up to 30 ppm, but may not exceed 75 ppm. If the Step (c) control limit for CO is less than 0.5 percent the CO control limit may be increased by up to 0.3 percent but may not exceed 0.5 percent.

- (g) Idle control limit values may be rounded to the nearest 10 ppm HC and 0.1 percent CO in conformance to ASTM Designation: E29 67.
- (h) The maximum allowable steady state control limits for HC and CO are those values used as the idle mode standards shown in Section 2176 of Title 13 of the California Administrative Code "Idle-Emission-Standards-for-California-Highway-Light-Duty-Vehicle Inspection" for the vehicle model year.

## California Assembly-Line Test Procedures

Control limit values shall be redetermined for each succeeding quarter based on the measured emissions from at least 100 vehicles produced during the last half of the preceding quarterly production of each engine family or subfamily tested by the steady state inspection test. When production levels do not permit compliance with the above, data from vehicles produced during the first half of the preceding quarter may be used. If the quarterly production of any engine family is less than 100 vehicles, the manufacturer shall use the test results from all vehicles produced that quarter in determining the control limit values for the next quarter.

The Executive Officer shall be notified within one week if control limit values are redetermined following running changes which affect idle emissions levels. The new control limit values and the month they first went into effect shall be part of the notification.

Note: Data from any vehicle indicating gross engine malfunction, failure or disconnection of any emission control component, shall be excluded from that used for generating control limit values. Retest data on vehicles exceeding the control limits shall not be used in determining control limit values for subsequent quarters.

## California Assembly-Line Test Procedures

Control limit values shall be redetermined for each succeeding quarter based on the measured emissions from at least 100 vehicles produced during the last half of the preceding quarterly production of each engine family or subfamily tested by the steady state inspection test. When production levels do not permit compliance with the above, data from vehicles produced during the first half of the preceding quarter may be used. If the quarterly production of any engine family is less than 100 vehicles, the manufacturer shall use the test results from all vehicles produced that quarter in determining the control limit values for the next quarter.

The Executive Officer shall be notified within one week if control limit values are redetermined following running changes which affect idle emissions levels. The new control limit values and the month they first went into effect shall be part of the notification.

Note: Data from any vehicle indicating gross engine malfunction, failure or disconnection of any emission control component, shall be excluded from that used for generating control limit values. Retest data on vehicles exceeding the control limits shall not be used in determining control limit values for subsequent quarters.



## California Assembly-Line Test Procedures

### 3. Inspection Test Procedures

#### (a) Functional Tests

In addition to meeting the requirements of Section 2 (Emission Standards) of the Assembly-Line Inspection Test Procedures, functional tests of the engine components and control systems which affect emissions shall be made prior to the inspection test. If a vehicle fails one or more functional tests, it must be repaired and pass a functional retest before it can be emission tested.

A list of the items to be functionally checked and a procedure for performing these checks must be submitted to the Executive Officer prior to the start of a model production year. Within 60 days of its receipt the Executive Officer may require revisions to the proposal.

#### (b) Steady State Inspection Test

The steady state inspection test shall consist of a determination of HC and CO with the engine operating in a normal idle condition. All tests, including control limit test vehicles, shall be conducted as follows:

## California Assembly-Line Test Procedures

- (1) Vehicles shall be tested in the normal "warmed-up" operating temperature range. This condition is considered to be between when the choke is fully open with the engine running at curb idle speed and before the water temperature gets so high that thermal override devices are actuated to prevent overheating.

The test vehicles should be warmed-up as similarly as possible to those used to determine its control limits.

- (2) The vehicle shall be in park, neutral, or drive gear and all accessories turned off and shall be consistent with the techniques used to establish the control limits.
- (3) The sampling probes of the analytical system shall be inserted into the exhaust outlets far enough to avoid dilution with the outside air. Where this is not possible, a tailpipe extension shall be used.

### 4. Reports

Reports shall be submitted to the Air Resources Board within 30 calendar days of the end of each calendar quarter and within 60 calendar days of the end of the manufacturer's model production year. Results for two different model years shall not be combined statistically.

## California Assembly-Line Test Procedures

- (1) Vehicles shall be tested in the normal "warmed-up" operating temperature range. This condition is considered to be between when the choke is fully open with the engine running at curb idle speed and before the water temperature gets so high that thermal override devices are actuated to prevent overheating.

The test vehicles should be warmed-up as similarly as possible to those used to determine its control limits.

- (2) The vehicle shall be in park, neutral, or drive gear and all accessories turned off and shall be consistent with the techniques used to establish the control limits.
- (3) The sampling probes of the analytical system shall be inserted into the exhaust outlets far enough to avoid dilution with the outside air. Where this is not possible, a tailpipe extension shall be used.

### 4. Reports

Reports shall be submitted to the Air Resources Board within 30 calendar days of the end of each calendar quarter and within 60 calendar days of the end of the manufacturer's model production year. Results for two different model years shall not be combined statistically.

## California Assembly-Line Test Procedures

The report shall include:

- (a) For steady state tests, the mean and the standard deviation of those tests required to determine control limits.
- (b) Temporary quarterly control limit values obtained for first quarter of production.
- (c) Steady state control limit values for the next quarter's production.
- (d) HC values stated as hexane equivalents (NDIR).

### C. Quality Audit Test Procedures

The manufacturer may elect either of the following two optional procedures for each engine family. The manufacturer shall notify the Executive Officer of the selection made after the first 30 quality audit vehicles have been tested for an engine family. The selected option shall remain in effect for the production of the model year including the first 30 tested vehicles.

#### OPTION 1

##### 1. Applicability

This procedure is applicable, beginning with the 1976 1977 model-year, to all manufacturers of gasoline-powered passenger cars and light-duty trucks having an engine displacement greater than 50 cubic inches.

##### 2. Standards and Test Procedures

The emission standards and the sampling and analytical procedure shall be that described in the Official California Exhaust Emission Test Procedures for the model year in production, with the specific exceptions stated as follows:

- (a) The evaporative emission control system may be isolated during the test by disconnection or use of a slave canister.

## California Assembly-Line Test Procedures

- (b) The vehicle shall be tested as received from the inspection test operations, except for mileage accumulation or engine run-in. The schedule for mileage accumulation or engine run-in and any changes to the schedule must be submitted to the Executive Officer with each quarterly report. This schedule must be reasonably adhered to for all quality audit testing within an engine family or subfamily basis or engine family or subfamily/assembly plant basis. After the inspection test operations no emissions tests may be performed prior to the first quality audit test. If the vehicle is shipped to a remote facility for quality audit testing normal dealer pre-delivery inspection may be performed. If the manufacturer elects the retest provision of Paragraph C.2.(c)(2), additional mileage accumulation between quality audit tests will be allowed provided there are no additional emissions tests.
- (c) The manufacturer has the option of either of the following:
- (1) The initial quality audit test shall comprise the official data for that vehicle, or
  - (2) The manufacturer may retest without repair or adjustment any vehicle that exceeds the standard for a given compound, provided he also retests without repair or adjustment all vehicles with initial quality audit test emission values that are 90 to 100% of standard for the same compound. The emission values determined for all compounds by the second test shall be the official data for these retested vehicles. The manufacturer may elect to implement this option on either an engine family (or subfamily) basis or engine family (or subfamily)/assembly plant basis. If option (c) (2) is elected at any time, the retest schedule must be adhered to for a minimum of 30 calendar days.

## California Assembly-Line Test Procedures

- (b) The vehicle shall be tested as received from the inspection test operations, except for mileage accumulation or engine run-in. The schedule for mileage accumulation or engine run-in and any changes to the schedule must be submitted to the Executive Officer with each quarterly report. This schedule must be reasonably adhered to for all quality audit testing within an engine family or subfamily basis or engine family or subfamily/assembly plant basis. After the inspection test operations no emissions tests may be performed prior to the first quality audit test. If the vehicle is shipped to a remote facility for quality audit testing normal dealer pre-delivery inspection may be performed. If the manufacturer elects the retest provision of Paragraph C.2.(c)(2), additional mileage accumulation between quality audit tests will be allowed provided there are no additional emissions tests.
- (c) The manufacturer has the option of either of the following:
- (1) The initial quality audit test shall comprise the official data for that vehicle, or
  - (2) The manufacturer may retest without repair or adjustment any vehicle that exceeds the standard for a given compound, provided he also retests without repair or adjustment all vehicles with initial quality audit test emission values that are 90 to 100% of standard for the same compound. The emission values determined for all compounds by the second test shall be the official data for these retested vehicles. The manufacturer may elect to implement this option on either an engine family (or subfamily) basis or engine family (or subfamily)/assembly plant basis. If option (c) (2) is elected at any time, the retest schedule must be adhered to for a minimum of 30 calendar days.

3. (3) Vehicle Sample Selection

~~The number of vehicles in the sample shall be not less than two percent (2.0%) of the calendar quarterly production of each engine family.~~ For each engine family: A continuous sample rate shall be chosen by the manufacturer to provide a sample which is representative of the total production. The manufacturer shall select a sample rate which he determines will be satisfactory for use by the Air Resources Board in determining the number of vehicles in the entire population of a particular engine family that is not meeting Board established emission standards by extrapolation from the percentage of the sample not meeting the standards. The results from the sample may be extrapolated to the entire population subject to the provisions relating to vehicle exclusion contained in Paragraph C.5. The sample rate so chosen shall not be less than 2.0%. For these manufacturers who do not sell more than 100 motor vehicles a year in California, the number of vehicles in the sample shall be not less than two percent (2.0%) of the model year production of each engine family.

The Executive Officer may upon notice to the manufacturer require the sample rate to be increased to up to ten percent (not to exceed 30 additional vehicles) of the calendar quarterly production of any engine family by invoking Section 2110 of Title 13 of the California Administrative Code.

## California Assembly-Line Test Procedures

They The test vehicles shall be equipped with exhaust controls as for California and shall be representative of 100 percent of each manufacturer's total California sales. Vehicles shall be selected as randomly as practicable for each engine family. Selection procedures shall be submitted to the Executive Officer prior to use. All vehicles shall have completed the steady state inspection test-repair cycle.

### 4. Reports

Reports shall be submitted to the Air Resources Board within 30 calendar days of the end of each calendar quarter and within 60 calendar days of the end of the manufacturer's model production year. In addition, a shorter reporting period may be required at the option of the Executive Officer by invoking Section 2109 or 2110 of Title 13 of the California Administrative Code. Any engine family whose first 30 tested vehicles of any calendar quarter of production with a failure rate in excess of that described in paragraph C.5. (Evaluation) shall be reported as soon as practicable within 10 working days. Additionally, the manufacturer shall evaluate the test results of each engine family at the end of each month. If the sample size is 30 or more vehicles the Executive Officer shall be notified as soon as practicable within 10 working days if there is a failure rate in excess of that described in paragraph C.5. (Evaluation)

Quarterly reports shall include:

- (a) Total production and test sample size for each engine family.



## California Assembly-Line Test Procedures

~~They~~ The test vehicles shall be equipped with exhaust controls as for California and shall be representative of 100 percent of each manufacturer's total California sales. Vehicles shall be selected as randomly as practicable for each engine family. Selection procedures shall be submitted to the Executive Officer prior to use. All vehicles shall have completed the steady state inspection test-repair cycle.

### 4. Reports

Reports shall be submitted to the Air Resources Board within 30 calendar days of the end of each calendar quarter and within 60 calendar days of the end of the manufacturer's model production year. In addition, a shorter reporting period may be required at the option of the Executive Officer by invoking Section 2109 or 2110 of Title 13 of the California Administrative Code. Any engine family whose first 30 tested vehicles of any calendar quarter of production with a failure rate in excess of that described in paragraph C.5. (Evaluation) shall be reported as soon as practicable within 10 working days. Additionally, the manufacturer shall evaluate the test results of each engine family at the end of each month. If the sample size is 30 or more vehicles the Executive Officer shall be notified as soon as practicable within 10 working days if there is a failure rate in excess of that described in paragraph C.5. (Evaluation)

Quarterly reports shall include:

- (a) Total production and test sample size for each engine family.

## California Assembly-Line Test Procedures

- (b) Sample description for each engine family, including vehicle make, engine size, vehicle identification number, carburetion and transmission system.
- (c) Emission data for each vehicle tested corrected for methane as allowed in the California Exhaust Emission Standards and Test Procedures. Vehicles exceeding the standards may be repaired but the results of the original emission tests shall be reported. If a manufacturer retests any vehicle of an engine family without repair or adjustment the results of the first two tests shall be reported. In reporting the data and comparing to the standards, the rounding-off method used shall conform to ASTM E29 67.
- (d) Statistical analysis of the quality audit test results for each engine family stating:
  - (1) Number of vehicles initially tested.
  - (2) Average emission and standard deviation of total sample.
  - (3) Number of vehicles exceeding:
    - (a) hydrocarbon standard
    - (b) carbon monoxide standard
    - (c) oxides of nitrogen standard
- (e) Statistical analysis as enumerated in paragraph C.4. (d) (2) and C.4. (d) (3) using the exhaust emission test results as determined in paragraph C.4.(c) for each quality audit vehicle multiplied by the appropriate approval deterioration factor. These data shall be submitted for information only.

## California Assembly-Line Test Procedures

- (f) The final report shall include the date of the end of the manufacturer's model production year for each engine family.

If the manufacturer elects the retest option of paragraph C.2.(c) (2) the dates of each test and retest must be reported. If this retest option is implemented on a subfamily or engine family or subfamily/assembly plant basis the individual test data must be so identified by subfamily and/or assembly plant.

### 5. Evaluation

Based upon additional information submitted by a manufacturer, the Executive Officer may allow rejection of any data from vehicles if they are considered to be not typical of production.

If more than 10% of the quality audit sample of an engine family for a full or combined calendar quarter of production exceeds the certification approval standard for a given compound, the Board will consider probable cause exists for finding violation of Section 43106 39155 of the California Health and Safety Code for that family. Section 2109 of Title 13 of the California Administrative Code may be invoked. In order to evaluate test data as to pass/fail rate for short start-up production periods (less than a full calendar quarter) test data will be added to and then evaluated with full production quarters.

## California Assembly-Line Test Procedures

- (f) The final report shall include the date of the end of the manufacturer's model production year for each engine family.

If the manufacturer elects the retest option of paragraph C.2.(c) (2) the dates of each test and retest must be reported. If this retest option is implemented on a subfamily or engine family or subfamily/assembly plant basis the individual test data must be so identified by subfamily and/or assembly plant.

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If more than 10% of the quality audit sample of an engine family for a full or combined calendar quarter of production exceeds the certification approval standard for a given compound, the Board will consider probable cause exists for finding violation of Section 43106 39155 of the California Health and Safety Code for that family. Section 2109 of Title 13 of the California Administrative Code may be invoked. In order to evaluate test data as to pass/fail rate for short start-up production periods (less than a full calendar quarter) test data will be added to and then evaluated with full production quarters.

## California Assembly-Line Test Procedures

For a given engine family, if more than 10% of the first 30 vehicles quality audit tested, or of the monthly evaluation of 30 or more vehicles quality audit tested, or of the total vehicles quality audit tested in a short start-up production period exceed the certification standard for a given compound Section 2110 of Title 13 of the California Administrative Code may be invoked.

This evaluation does not apply to sample sizes less than thirty (30) vehicles. If a sample size for a particular production quarter is less than 30 vehicles, the data will be accumulated on a quarter to quarter basis until at least 30 vehicles have been quality audit tested. That engine family will then be evaluated according to this section. If the last quarter's production has less than 30 tested vehicles, it will be evaluated with the previous quarters of production until there is a sample size of at least 30 tested vehicles.

In addition, if the Executive Officer has required a larger sample rate and/or shorter reporting period by invoking Section 2109 or 2110 an evaluation will be made of vehicles produced subsequent to the invocation of a plan adopted pursuant to Section 2109 or 2110 with each report as long as the sample size is at least 30 vehicles.

In order to evaluate test data as to pass/fail rate short production periods (less than a full calendar quarter) will be added to and then evaluated with full production quarters. -- Therefore, if the start of production is a short production quarter, the test data will be accumulated and evaluated together with the next calendar quarter's test data. If the buildout period is a short production quarter, the test data will be accumulated and evaluated together with the previous calendar quarter's test data. -- The sample size requirement of paragraph 6.3 applies to any short production quarter. -- However, quarterly reports are required for each calendar quarter of production including those that are short production periods.

If a manufacturer produces vehicles during two calendar quarters only both short production periods, then evaluation will be made once at the end of total production.

### California Statutes and Regulations

#### Health and Safety Code

"Section ~~39155~~ 43106. Each new motor vehicle or engine required pursuant to this part to meet the emission standards established pursuant to Section 43101 in Article 2 (commencing with Section 39100) of this chapter shall be, in all material respects, substantially the same in construction as the test motor vehicle or engine, as the case may be, and ~~transmission combination~~ which has been certified approved by the state board ~~Board~~ in accordance with Section ~~39151~~; 43104. However, ~~provided that~~ changes with respect to new motor vehicles or engines previously certified approved may be made if such changes do not increase emissions above the these standards under which those motor vehicles or engines, as the case may be, for which approval was granted and provided

## California Assembly-Line Procedures

In-order-to-evaluate-test-data-as-to-pass/fail-rate-short-production periods-(less-than-a-full-calendar-quarter)-will-be-added-to-and-then evaluated-with-full-production-quarters.--Therefore,-if-the-start-of production-is-a-short-production-quarter,-the-test-data-will-be-accumulated-and-evaluated-together-with-the-next-calendar-quarter's-test-data. If-the-buildout-period-is-a-short-production-quarter,-the-test-data-will be-accumulated-and-evaluated-together-with-the-previous-calendar-quarter's test-data.--The-sample-size-requirement-of-paragraph-6.3.-applies-to-any short-production-quarter.--However,-quarterly-reports-are-required-for each-calendar-quarter-of-production-including-those-that-are-short-production-periods-

If-a-manufacturer-produces-vehicles-during-two-calendar-quarters-only both-short-production-periods,-then-evaluation-will-be-made-once-at-the-end-of-total-production-

### California Statutes and Regulations

#### Health and Safety Code

"Section 39155 43106. Each new motor vehicle or engine required pursuant to this part to meet the emission standards established pursuant to Section 43101 in Article 2-(commencing with Section 39100)-of this chapter shall be, in all material respects, substantially the same in construction as the test motor vehicle or engine, as the case may be, and-transmission-combination which has been certified approved by the state board Board in accordance with Section 39151; 43104. However, provided-that changes with respect to new motor vehicles or engines previously certified approved may be made if such changes do not increase emissions above the those standards under which those motor vehicles or engines, as the case may be, for which approval was granted and provided

~~that such changes were certified and are made in accordance with~~  
~~procedures specified by the state board." Board pursuant to subdivision~~  
~~(k) of Section 39052. "Also enforcement procedures may be instituted~~  
~~under Section 2100-2109 of Title 13 of the California Administrative Code.~~

Title 13, Administrative Code

Applicable Sections of Article 2, Subchapter 2, Chapter 3 of the California  
Administrative Code.

C. Quality Audit Test Procedures

OPTION 2

1. Applicability

This procedure is applicable, beginning with the 1977 model year, to  
all manufacturers of gasoline-powered passenger cars and light-duty  
trucks having an engine displacement greater than 50 cubic inches.

2. Standards and Test Procedures

The emission standards shall be the California exhaust emission standards  
for the model year in production.

The sampling and analytical procedure shall be that described in the  
California Exhaust Emission Standards and Test Procedures for the model  
year in production, with the specific exceptions stated as follows:

- (a) The evaporative emission control system may be isolated during  
the test by disconnection or use of a slave canister.
- (b) The vehicle shall be tested as received from the inspection  
test operations, except for mileage accumulation or engine run-in.

The schedule for mileage accumulation or engine run-in and any  
changes to the schedule must be submitted to the Executive Officer  
with each quarterly report. This schedule must be reasonably adhered  
to for all quality audit testing within an engine family or subfamily



basis or engine family or subfamily/assembly plant basis. After the inspection test operations no emissions tests may be performed prior to the first quality audit test. If the vehicle is shipped to a remote facility for quality audit testing normal dealer pre-delivery inspection may be performed.

(c) The initial quality audit test shall comprise the official data for that vehicle

### 3. Vehicle Sample Selection

For each engine family: A continuous sample rate shall be chosen by the manufacturer to provide a sample which is representative of the total production. The manufacturer shall select a sample rate which he determines will be satisfactory for use by the Air Resources Board in determining the number of vehicles in the entire population of a particular engine family that is not meeting Board established emission standards by extrapolation from the percentage of the sample not meeting the standards. The results from the sample may be extrapolated to the entire population subject to the provisions relating to vehicle exclusion contained in Paragraph C.5. The sample rate so chosen shall not be less than 2.0%. The Executive Officer may upon notice to the manufacturer require the sample rate to be increased to up to ten percent (not to exceed 30 additional vehicles) of the calendar quarterly production of any engine family by invoking Section 2110 of Title 13 of the California Administrative Code.

The test vehicles shall be equipped with exhaust controls as for California and shall be representative of 100 percent of each manufacturer's total California sales. Vehicles shall be selected as randomly as practicable for each engine family. Selection procedures shall be submitted to the Executive Officer prior to use. All vehicles shall have completed the steady state inspection test-repair cycle.

basis or engine family or subfamily/assembly plant basis. After the inspection test operations no emissions tests may be performed prior to the first quality audit test. If the vehicle is shipped to a remote facility for quality audit testing normal dealer pre-delivery inspection may be performed.

(c) The initial quality audit test shall comprise the official data for that vehicle

### 3. Vehicle Sample Selection

For each engine family: A continuous sample rate shall be chosen by the manufacturer to provide a sample which is representative of the total production. The manufacturer shall select a sample rate which he determines will be satisfactory for use by the Air Resources Board in determining the number of vehicles in the entire population of a particular engine family that is not meeting Board established emission standards by extrapolation from the percentage of the sample not meeting the standards. The results from the sample may be extrapolated to the entire population subject to the provisions relating to vehicle exclusion contained in Paragraph C.5. The sample rate so chosen shall not be less than 2.0%. The Executive Officer may upon notice to the manufacturer require the sample rate to be increased to up to ten percent (not to exceed 30 additional vehicles) of the calendar quarterly production of any engine family by invoking Section 2110 of Title 13 of the California Administrative Code.

The test vehicles shall be equipped with exhaust controls as for California and shall be representative of 100 percent of each manufacturer's total California sales. Vehicles shall be selected as randomly as practicable for each engine family. Selection procedures shall be submitted to the Executive Officer prior to use. All vehicles shall have completed the steady state inspection test-repair cycle.

4. Reports

Reports shall be submitted to the Air Resources Board within 30 calendar days of the end of each calendar quarter and within 60 calendar days of the end of the manufacturer's model production year. In addition, a shorter reporting period may be required at the option of the Executive Officer by invoking Section 2109 or 2110 of Title 13 of the California Administrative Code. Any engine family whose first 30 tested vehicles of any calendar quarter of production with a failure rate in excess of that described in paragraph C.5. (Evaluation) shall be reported as soon as practicable within 10 working days. Additionally, the manufacturer shall evaluate the test results of each engine family at the end of each month. If the sample size is 30 or more vehicles the Executive Officer shall be notified as soon as practicable within 10 working days if there is a failure rate in excess of that described in paragraph C.5. (Evaluation).

Quarterly report shall include:

- (a) Total production and test sample size for each engine family.
- (b) Sample description for each engine family, include vehicle make, engine, size, vehicle identification number, carburetion and transmission system.
- (c) Emission data for each vehicle tested corrected for methane as allowed in the California Exhaust Emission Standards and Test Procedures. Vehicles exceeding the standards may be repaired but the results of the original emission tests shall be reported. In reporting the data the rounding-off method used shall conform to ASTM E29 67.

## California Assembly-Line Test Procedures

- (d) Statistical analysis of the quality audit test results for each engine family stating:

  - (1) Number of vehicles initially tested.
  - (2) Average emissions multiplied by the appropriate certification deterioration factor and the standard deviations of total sample based on emission data for each vehicle tested. The methane correction, as allowed in the California Exhaust Emission Standards and Test Procedures, shall be applied to emission data for each vehicle prior to calculation of the average emissions and standard deviations.
  - (3) After adjustment for methane and deterioration factor, the number of vehicles exceeding:

    - (a) hydrocarbon standard
    - (b) carbon monoxide standard
    - (c) oxides of nitrogen standard
  - (4) After adjustment for methane, the number of vehicles exceeding:

    - (a) hydrocarbon standard
    - (b) carbon monoxide standard
    - (c) oxides of nitrogen standard
- (e) The final report shall include the date of the end of the manufacturer's model production year for each engine family.

(d) Statistical analysis of the quality audit test results for each engine family stating:

(1) Number of vehicles initially tested.

(2) Average emissions multiplied by the appropriate certification deterioration factor and the standard deviations of total sample based on emission data for each vehicle tested. The methane correction, as allowed in the California Exhaust Emission Standards and Test Procedures, shall be applied to emission data for each vehicle prior to calculation of the average emissions and standard deviations.

(3) After adjustment for methane and deterioration factor, the number of vehicles exceeding:

(a) hydrocarbon standard

(b) carbon monoxide standard

(c) oxides of nitrogen standard

(4) After adjustment for methane, the number of vehicles exceeding:

(a) hydrocarbon standard

(b) carbon monoxide standard

(c) oxides of nitrogen standard

(e) The final report shall include the date of the end of the manufacturer's model production year for each engine family.

5. Evaluation

Based upon additional information submitted by a manufacturer, the Executive Officer may allow rejection of any data from vehicles if they are considered to be not typical of production.

If the average emissions of the quality audit sample, as determined after multiplying emission data for each vehicle tested by the appropriate methane correction and certification deterioration factors in accordance with paragraph C.4, of an engine family for a full or combined calendar quarter of production exceeds the certification standard for a given compound, the Board will consider probable cause exists for finding violation of Section 43106 of the California Health and Safety Code for that family. Section 2109 of Title 13 of the California Administrative Code may be invoked. In order to evaluate test data as to pass/fail rate for short start-up production periods (less than a full calendar quarter) test data will be added to and then evaluated with full production quarters.

For a given engine family, if the average of the first 30 vehicles quality audit tested or if the monthly evaluation of 30 vehicles quality audit tested exceeds the standard for a given compound Section 2110 of Title 13 of the California Administrative Code may be invoked.

This evaluation does not apply to sample sizes less than thirty (30) vehicles. If a sample size for a particular production quarter is less than 30 vehicles, the data will be accumulated on a quarter to quarter basis until at least 30 vehicles have been quality audit tested. That engine family will then be evaluated according to this section. If the last quarter's production has less than 30 tested vehicles, it

## California Assembly-Line Test Procedures

will be evaluated with the previous quarters of production until there is a sample size of at least 30 tested vehicles.

In addition, if the Executive Officer has required a larger sample rate and/or shorter reporting period by invoking Section 2109 or 2110 an evaluation will be made on vehicles produced subsequent to the invocation of a plan adopted pursuant to Section 2109 or 2110 with each report as long as the sample size is at least 30 vehicles.

### California Statutes and Regulations

#### Health and Safety Code

"Section 43106. Each new motor vehicle or engine required pursuant to this part to meet the emission standard established pursuant to Section 43101 shall be, in all material respects, substantially the same in construction as the test motor vehicle or engine, as the case may be, which has been certified by the state board in accordance with Section 43104. However, changes with respect to new motor vehicles or engines previously certified may be made if such changes do not increase emissions above the standards under which those motor vehicles or engines, as the case may be, were certified and are made in accordance with procedures specified by the state board."

#### Title 13, Administrative Code

Applicable Sections of Article 2, Subchapter 2, Chapter 3 of the California Administrative Code.

## California Assembly-Line Test Procedures

will be evaluated with the previous quarters of production until there is a sample size of at least 30 tested vehicles.

In addition, if the Executive Officer has required a larger sample rate and/or shorter reporting period by invoking Section 2109 or 2110 an evaluation will be made on vehicles produced subsequent to the invocation of a plan adopted pursuant to Section 2109 or 2110 with each report as long as the sample size is at least 30 vehicles.

### California Statutes and Regulations

#### Health and Safety Code

"Section 43106. Each new motor vehicle or engine required pursuant to this part to meet the emission standard established pursuant to Section 43101 shall be, in all material respects, substantially the same in construction as the test motor vehicle or engine, as the case may be, which has been certified by the state board in accordance with Section 43104. However, changes with respect to new motor vehicles or engines previously certified may be made if such changes do not increase emissions above the standards under which those motor vehicles or engines, as the case may be, were certified and are made in accordance with procedures specified by the state board."

#### Title 13, Administrative Code

Applicable Sections of Article 2, Subchapter 2, Chapter 3 of the California Administrative Code.



## California Assembly-Line Test Procedures

### DEFINITIONS

For the purposes of these procedures, the following shall apply:

1. Calendar Quarter is defined as those three month periods of time which start on the 1st day of January, April, July and October.
2. First or Last Calendar Quarter Production is defined as the calendar quarter in which the production of an engine family begins or ends.
3. End of Assembly-Line is defined as that place where the final inspection test or quality audit test is performed.
4. Assembly-Line Tests are those tests or inspections which are performed at the end of the assembly-line.
5. Assembly-Line Quality Audit Test is defined as the test performed on a minimum sample of 2.0% of the production vehicles for sale in California.
6. Assembly-Line Inspection Tests are those steady state and functional tests performed on production vehicles for sale in California.
7. Functional Test is defined as a type of test or inspection which is performed on engines or vehicles to detect if the emission control system is operating properly.
8. Gross Engine Malfunction is defined as one yielding an emission value greater than the sum of the mean plus three (3) times the standard deviation. This definition shall apply only for determination of control limits.

## California Assembly-Line Test Procedures

9. Passenger Car is defined as any motor vehicle designed primarily for transportation of persons and having a capacity of 12 persons or less.
10. Light-Duty Truck is defined as any motor vehicle, rated at 6,000 pounds gross vehicle weight or less, which is designed primarily for purposes of transportation of property or is a derivative of such a vehicle, or is available with special features enabling off-street or off-highway operation and use.

## California Assembly-Line Test Procedures

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Title 13  
California Administrative Code

2106. Assembly-Line Inspection Testing. If reports required by an assembly-line test procedure under Article 1 of Subchapter 2 are not in accordance with reporting requirements or if surveillance under Article 2 or Article 3 of Subchapter 2 indicates that assembly-line inspection testing is being improperly performed, or that vehicles are being manufactured which do not comply with the assembly-line emission standards or functional test requirements, the Executive Officer may order corrections of reporting or test procedures, and may, in accordance with Sections 2109 or 2110, as applicable, order correction of vehicles not in compliance with applicable laws, emission standards, or test procedures.

2107. Assembly-Line Quality-Audit Testing. If any official test procedure adopted by the Board specifies that the Board may find a violation of Sections ~~39154~~ 43105 or ~~39155~~ 43106 of the Health and Safety Code or of this Article when a specified percentage of assembly-line vehicles exceeds a standard and when data submitted by the manufacturer indicates such percentage is being exceeded, or if surveillance under Article 2 or Article 3 of Subchapter 2 indicates that assembly-line quality audit testing is being improperly performed, the Executive Officer may invoke the provisions of Sections 2109 or 2110, as applicable.

2108. Order of Executive Officer. Failure to comply with any order of the Executive Officer issued pursuant to this article may result in the revocation or conditioning of approval certification in the manner specified in Sections 2109 or 2110, as applicable.

## Title 13

### California Administrative Code

2110. Enforcement Action for Assembly-Line Quality Audit Testing of Less Than a Full Calendar Quarter of Production. (a) When, pursuant to an applicable assembly-line test procedure, quality audit testing is being improperly performed or if excessive failure rates are reported prior to regular quarterly reporting dates, or for short start-up production periods, the Executive Officer may require the manufacturer to submit a plan to bring all vehicles in possession of the under manufacturer into compliance. The Executive Officer may order execution of the plan with such changes and additions as he determines are necessary, including additional testing and reporting, consistent with the applicable assembly-line test procedures, to verify acceptability of the plan.

(b) The manufacturer may request a public hearing on the necessity for or scope of any corrective action ordered by the Executive Officer. Such a hearing shall be held within 10 calendar days of receipt of the manufacturer's request for such a hearing. The plan ordered by the Executive Officer shall remain in effect pending such hearing, unless otherwise ordered by the Executive Officer.

(c) If the Executive Officer finds that any corrective action ordered pursuant to subsection (a) of this section has not been taken within a reasonable period of time, ~~promptly~~, the Board shall hold a public hearing to consider whether approval of such vehicles shall be revoked or conditioned. The Board may revoke or condition approval if it finds that the corrective action ordered by the Executive Officer was reasonable and that the manufacturer failed to comply or to comply ~~promptly~~ within a reasonable period of time.

State of California

AIR RESOURCES BOARD

Resolution 76-9

February 20, 1976

WHEREAS, an unsolicited research proposal No. 510-34 entitled "Size-Selective Monitoring Techniques for Particulate Matter in California Air" has been submitted to the Air Resources Board;

WHEREAS, the Research Screening Committee has evaluated this proposal; and

WHEREAS, the Research Screening Committee has recommended for funding the proposal:

ARB Proposal No. 510-34 entitled "Size-Selective Monitoring Techniques for Particulate Matter in California Air", submitted by the Air and Industrial Hygiene Laboratory of the California Department of Health for an amount not to exceed \$95,058;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board accepts the recommendation of the Research Screening Committee and approves the proposal:

ARB Proposal No. 510-34 entitled "Size-Selective Monitoring Techniques for Particulate Matter in California Air", submitted by the Air and Industrial Hygiene Laboratory of the California Department of Health for an amount not to exceed \$95,058,

and authorizes the Executive Officer to initiate administrative procedures and to execute all necessary documents and contracts for the research effort proposed in an amount not to exceed \$95,058.

State of California

AIR RESOURCES BOARD

RESOLUTION 76-11

February 20, 1976

WHEREAS, the Air Resources Board, pursuant to Section 39606 of the Health and Safety Code, has the authority, after holding a public hearing, to adopt standards of ambient air quality;

WHEREAS the Air Resources Board, pursuant to Section 39601 of the Health and Safety Code has the authority to adopt standards, rules and regulations necessary for the proper execution of the powers and duties granted to and imposed upon it;

WHEREAS the Board has held a public hearing, pursuant to the Administrative Procedure Act, to consider the California ambient air quality standard for airborne sulfates on February 20, 1976;

WHEREAS the State Department of Health has recommended that regulatory actions be taken to prevent exposures to airborne sulfates in excess of 25 micrograms per cubic meter of sulfate, averaged over 24 hours;

WHEREAS the Air Resources Board finds substantial evidence of adverse effects attributable to airborne sulfates on human health, vegetation, property and visibility,

NOW, THEREFORE, BE IT RESOLVED that the Air Resources Board establishes an ambient air quality standard for airborne sulfates of 25 micrograms per cubic meter of sulfate, averaged over 24 hours, and that Title 17, Section 70200 of the California Administrative Code be amended to add a new horizontal column at the bottom of the Table therein to read as follows:

Sulfates	25 $\mu\text{g}/\text{m}^3$ total sulfates, AIHL #61	24 hours	a) decrease in ventilatory function b) aggravation of asthmatic symptoms c) aggravation of cardio-pulmonary disease d) vegetation damage e) degradation of visibility f) property damage	This standard is based on a Critical Harm Level, not a threshold value.
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BE IT FURTHER RESOLVED, that the staff seek additional information concerning mechanisms of sulfate aerosol formation, the relative toxicity of the various sulfate compounds, particle size range, appropriate measuring methods for the various sulfate compounds, establishment of averaging periods other than 24-hours, particularly for the protection of California agricultural and other vegetation, and report such additional information to the Board not later than February 1, 1977 for consideration by the Board in reviewing the standard.

## APPENDIX B

### PERSONAL PROTECTIVE ACTIONS DURING AIR POLLUTION EPISODES

#### 3. SULFUR DIOXIDE OR SULFATE

The following actions are recommended:

**FOR SENSITIVE PEOPLE** (At all episode Stages)

with **CHRONIC LUNG DISEASE OR RECURRENT ASTHMA,**

**CHRONIC HEART DISEASE,**

**THE ELDERLY OR THE CHRONICALLY ILL**

**FOR HEALTHY ADULTS OR THE EXERCISING YOUNG, who feel effects** (At all episode Stages)

**FOR THE GENERAL PUBLIC** (At Stage 3)

1. **REMAIN INDOORS** until the episode is terminated. Keep doors and windows closed if possible. Use your air conditioner (if you have one) to recirculate indoor air and keep cool. An activated charcoal air filter can further reduce sulfur oxide levels.
2. **AVOID AEROSOLS, DUSTS, FUMES,** and other respiratory irritants. Reduce to a minimum domestic activities, cooking, hobbies, or occupations which produce irritants.
3. **DO NOT SMOKE,** and avoid places where others are smoking. Pollutants from smoking make the health challenge worse.
4. **AVOID CONTACT** with persons suffering from respiratory infections.
5. **AVOID TRAFFIC CONGESTED AREAS** or industrial zones where pollutants are generated, if you must be outside.
6. **AVOID STRENUOUS OUTDOOR PHYSICAL ACTIVITIES,** exertion or excitement which increase your breathing rate and the oxygen requirements of your body. Plan less active diversions for the young.
7. **WITH STAGE 2 OR STAGE 3 EPISODES,** there may be the onset or considerable worsening of symptoms: chest tightness, nose and throat irritation, coughing, phlegm, wheezing or shortness of breath.

Follow your physician's advice, or consult him again. Know which medications to increase for specific symptoms. Do not become dehydrated, and obtain sufficient rest and sleep.

Know the location of your nearest emergency treatment facility in case your doctor advises increased therapy, such as inhaled medication, ventilation assistance, oxygen treatment or other.

#### EPISODE CRITERIA LEVELS

	Averaging Time	Stage 1	Stage 2	Stage 3
Sulfur Dioxide	1 Hour	0.5 ppm	1.0 ppm	2.0 ppm
	24 Hours	0.2 ppm	0.7 ppm	0.9 ppm

Sulfate, in Combination with Oxidant	24 Hours (Sulfate)	25 ug/m <sup>3</sup>
	1 hour (Oxidant)	.20 ppm



State of California  
AIR RESOURCES BOARD

Resolution 76-12

February 19, 1976

WHEREAS, Sections 39602, 41500 and 41601 of the Health and Safety Code direct the Air Resources Board and local air pollution control districts to endeavor to achieve and maintain the ambient air quality standards; and

WHEREAS, the ambient air quality standard for oxidant is frequently exceeded in most of the air basins in California; and

WHEREAS, hydrocarbon and other organic compounds are major precursors of photochemically generated oxidant; and

WHEREAS, some local and regional air pollution control districts have adopted regulations setting emission standards based upon an inconsistent classification of the reactivity of organic compounds; and

WHEREAS, the Board has determined that a consistent classification of reactivity is necessary to develop implementation plans to achieve and maintain ambient air quality standards for oxidant;

NOW, THEREFORE, BE IT RESOLVED, the Air Resources Board hereby adopts for the purpose of inventory and planning, the classification of organic compounds according to photochemical reactivity as set forth in Appendix V attached hereto.

## APPENDIX V

ARB  
REACTIVITY CLASSIFICATION OF ORGANIC COMPOUNDS

<u>Class I</u> <u>(Low Reactivity)</u>	<u>Class II</u> <u>(Moderate Reactivity)</u>	<u>Class III</u> <u>(High Reactivity)</u>
C <sub>1</sub> -C <sub>2</sub> Paraffins	Mono-tert-alkyl-benzenes	All other aromatic hydrocarbons
Acetylene	Cyclic Ketones	All Olefinic hydrocarbons (including partially halogenated)
Benzene	Alkyl acetates	Aliphatic aldehydes
Benzaldehyde	2-Nitropropane	Branched alkyl Ketones
Acetone	C <sub>3</sub> + Paraffins	Cellosolve acetate
Methanol	Cycloparaffins	Unsaturated Ketones
Tert-alkyl alcohols	n-alkyl Ketones	Primary & secondary C <sub>2</sub> + alcohols
Phenyl acetate	N-methyl pyrrolidone	Diacetone alcohol
Methyl benzoate	N,N-dimethyl acetamide	Ethers
Ethyl Amines	Alkyl Phenols*	Cellosolves
Dimethyl formamide	Methyl phthalates**	Glycols*
Perhalogenated Hydrocarbons		C <sub>2</sub> + Alkyl phthalates**
Partially halogenated paraffins		Other Esters**
Phthalic Anhydride**		Alcohol Amines**
Phthalic Acids**		C <sub>3</sub> + Organic acids + di acid**
Acetonitrile*		C <sub>3</sub> + di acid anhydrides**
Acetic Acid		Formin** (Hexa methylene-tetramine)
Aromatic Amines		Terpenic hydrocarbons
Hydroxyl Amines		Olefin oxides**
Naphthalene*		
Chlorobenzenes*		
Nitrobenzenes*		
Phenol *		

\* Reactivity data are either non-existent or inconclusive, but conclusive data from similar compounds are available; therefore, rating is uncertain but reasonable.

\*\* Reactivity data are uncertain.

State of California  
AIR RESOURCES BOARD  
Resolution 76-13  
March 30, 1976

WHEREAS, the Air Resources Board, pursuant to Section 39606(b) of the Health and Safety Code, has the authority, after holding a public hearing, to adopt ambient air quality standards for each air basin in consideration of aesthetic value and interference with visibility, and such standards may vary from one air basin to another;

WHEREAS, the Air Resources Board, pursuant to Section 39601 of the Health and Safety Code, has the authority to adopt standards, rules and regulations necessary for the proper execution of the powers and duties granted to and imposed upon it;

WHEREAS, the Air Resources Board has established the Lake Tahoe Air Basin;

WHEREAS, the Lake Tahoe Air Basin is an area of exceptional scenic beauty;

WHEREAS, the enjoyment of this beauty requires an ability to see clearly from crest to crest across the lake;

WHEREAS, the present statewide ambient air quality standard for visibility reducing particles is not appropriate for the Lake Tahoe Air Basin; and

WHEREAS, the Board has held a public hearing, pursuant to the Administrative Procedure Act, to consider the California ambient air quality standard for visibility reducing particles in the Lake Tahoe Air Basin,

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board hereby establishes the ambient air quality standard for visibility reducing particles in the Lake Tahoe Air Basin as: In sufficient amount to reduce the prevailing visibility to less than 30 miles when relative humidity is less than 70 percent; and that Title 17, Section 70200 of the California Administrative Code be amended to add a new horizontal column at the bottom of the Table herein to read as follows:

Substance	Concentration and Method*	Duration of Averaging Period	Most Relevant Effect
Visibility Reducing Particles (Applicable only in the Lake Tahoe Air Basin)	In sufficient amount to reduce the prevailing visibility** to less than 30 miles when relative humidity is less than 70%	1 observation	Reduction in scenic quality on days when the relative humidity is less than 70%

\* Any equivalent procedure which can be shown to the satisfaction of the Air Resources Board to give equivalent results at or near the level of the air quality standard may be used.

\*\* Prevailing visibility is defined as the greatest visibility which is attained or surpassed around at least half of the horizon circle, but not necessarily in continuous sectors.

State of California  
AIR RESOURCES BOARD  
Resolution 76-14  
March 30, 1976

WHEREAS, the Air Resources Board, pursuant to Section 39606(b) of the Health and Safety Code, has the authority after holding a public hearing, to adopt ambient air quality standards for each air basin in consideration of the public health, based upon the recommendations of the State Department of Health, and such standards may vary from one air basin to another;

WHEREAS, the Air Resources Board, pursuant to Section 39601 of the Health and Safety Code, has the authority to adopt standards, rules and regulations necessary for the proper execution of powers and duties granted to and imposed upon it;

WHEREAS, the Air Resources Board has established the Lake Tahoe Air Basin;

WHEREAS, the entire Lake Tahoe Air Basin is above 6000 feet in elevation;

WHEREAS, at higher elevations the health effects of ambient air carbon monoxide concentrations are greater than at lower elevations;

WHEREAS, the State Department of Health has recommended a special carbon monoxide standard for the Lake Tahoe Air Basin; and

WHEREAS, the Board has held a public hearing, pursuant to the Administrative Procedure Act, to consider the California ambient air quality standard for carbon monoxide in the Lake Tahoe Air Basin;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board hereby establishes the ambient air quality standard for carbon monoxide in the Lake Tahoe Air Basin of six parts per million, averaged over eight hours, and that Title 17, Section 70200 of the California Administrative Code be amended to add a new horizontal column at the bottom of the Table therein to read as follows:

Substance	Concentration and Method*	Duration of Averaging Period	Most Relevant Effect	Comment
Carbon Monoxide  (Applicable only in the Lake Tahoe Air Basin)	6 ppm NDIR	8 hours	Will Increase COHb by 1-1½%	At altitude the lowered oxygen tension leads to greater absorption of CO. Persons participating in strenuous recreational activities at higher altitudes are often unacclimated.

\* Any equivalent procedure which can be shown to the satisfaction of the Air Resources Board to give equivalent results at or near the level of the air quality standard may be used.

State of California  
AIR RESOURCES BOARD

Resolution 76-15

March 31, 1976

WHEREAS, Section 43104 of the Health and Safety Code requires the Air Resources Board to adopt test procedures specifying the manner in which new motor vehicles shall be certified;

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of the Administrative Procedure Act (Government Code, Title 2, Division 3, Part 1, Chapter 4.5);

NOW, THEREFORE, BE IT RESOLVED, that the "California Fuel Evaporative Emission Standard and Test Procedure for 1978 and Subsequent Model Gasoline-Powered Motor Vehicles Except Motorcycles", dated March 31, 1976 is adopted;

BE IT FURTHER RESOLVED, that the Board hereby amends Chapter 3, Subchapter 1, Article 2, Sections 1970 and 1976, of Title 13, California Administrative Code to read as follows:

1970. Fuel Evaporative Emissions--1973 through 1977 Model-Year Heavy-Duty Gasoline-Powered Vehicles. The board finds compliance with the following standard for fuel evaporative emissions of hydrocarbons to be necessary and technologically feasible for 1973 through 1977 model-year gasoline-powered heavy-duty motor vehicles. In accordance with this finding, the standard for such vehicles is:

Fuel evaporative emission controls for new heavy-duty gasoline-powered vehicles subject to this regulation shall provide substantially the same degree of control as for light-duty vehicles (2 grams per test as specified in 40 Code of Federal Regulations, Part 85, Subpart C, Section 85.22).

1976. Standards and Test Procedures for Fuel Evaporative Emissions from Gasoline-Powered Vehicles.

- a) Fuel evaporative emissions from 1970 through 1977 model passenger cars and light-duty trucks are set forth in 40 Code of Federal Regulation, Part 85, subparts A and C. These standards are enforced in California pursuant to Section 43008 of the Health and Safety Code.
- b) Fuel evaporative emissions from new 1978 and subsequent model year gasoline-powered motor vehicles except motorcycles shall not exceed 6.0 grams of hydrocarbons per test.

The procedure for determining compliance with this standard is set forth in "California Fuel Evaporative Emission Standard and Test Procedure for 1978 and Subsequent Model Gasoline-Powered Motor Vehicles except Motorcycles", adopted by the Air Resources Board on March 31, 1976.

State of California

AIR RESOURCES BOARD

Resolution 76-16

March 31, 1976

WHEREAS, Section 39601 authorizes the Air Resources Board to adopt standards, rules, and regulations necessary for the proper execution of the powers and duties granted to, and imposed upon, the Board by law;

WHEREAS, Sections 43101 and 43104 of the Health and Safety Code authorize the Board to adopt exhaust emission standards and test procedures in order to control or eliminate air pollution caused by motor vehicles;

WHEREAS, Section 43104 of the Health and Safety Code requires the Board to base its test procedures on federal test procedures or on driving patterns typical in the urban areas of California;

WHEREAS, on February 11, 1976 the U.S. Environmental Protection Agency proposed regulations based upon evidence that motor vehicles which have manufacturer's maximum gross vehicle weight ratings between 6,000 pounds and 8,500 pounds operate in driving patterns which are more similar to the patterns of passenger cars and light-duty trucks than to those of heavy-duty motor vehicles which have maximum gross vehicle weight ratings over 8,500 pounds;

WHEREAS, the Board has found that in recent years there has been an upward shift in the maximum gross vehicle weight rating of many vehicles which were formerly classified as light-duty trucks, thus reclassifying them as heavy-duty vehicles, although there has been no significant change in the basic use patterns of these vehicles during the same time period;

WHEREAS, the Board finds that vehicles which are currently classified as heavy-duty vehicles and which have maximum gross vehicle weight ratings of 8,500 pounds or less are more properly tested and controlled according to the same general test procedures now used for light-duty trucks;

WHEREAS, the Board finds that the emission control technology currently used on light-duty trucks can be readily applied to vehicles of less than 8,500 pounds gross vehicle weight rating; and

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of the Administrative Procedure Act (Government Code, Title 2, Division 3, Part 1, Chapter 4.5);

NOW, THEREFORE BE IT RESOLVED, that the Board hereby adopts the amendments to its regulations in Sections 1900, 1955.1, 1955.5, 1956, 1957, and 1959 in Chapter 3, Title 13, California Administrative Code, as shown in Attachments 1, 2, 3, 4, 5, and 6.

BE IT FURTHER ORDERED AND RESOLVED, that the Board adopts the "California Exhaust Emissions Standards and Test Procedures for 1975 Through 1978 Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles", the "California Exhaust Emission Standards and Test Procedures for 1975 and Subsequent Model-Year Gasoline-Fueled Heavy-Duty Engines and Vehicles," and the "California Exhaust Emission Standards and Test Procedures for 1975 and Subsequent Model-Year Diesel-Fueled Heavy-Duty Engines and Vehicles," all as amended March 31, 1976.



Amendments to Section 1900, Title 13,  
California Administrative Code

1. Delete Section 1900.
2. Add Section 1900 which reads as follows:

1900. Definitions.

- (a) The definitions set forth in Chapter 2 (beginning with Section 39010), Part 26 of the Health and Safety Code shall govern the provisions of this chapter and are hereby incorporated by reference.
- (b) In addition to the definitions incorporated under subdivision (a), the following definitions shall govern:
  - (1) "Heavy-duty engine" means an engine which is used to propel a heavy-duty vehicle.
  - (2) "Heavy-duty vehicle" means any motor vehicle having a manufacturer's gross vehicle weight rating greater than 6,000 pounds, except passenger cars.
  - (3) "Light-duty truck" means any motor vehicle, rated at 6,000 pounds gross vehicle weight or less, which is designed primarily for purposes of transportation of property or is a derivative of such a vehicle, or is available with special features enabling off-street or off-highway operation and use.
  - (4) "Medium-duty vehicle" means any heavy-duty vehicle having a manufacturer's gross vehicle weight rating of 8500 pounds or less.
  - (5) "Passenger car" means any motor vehicle designed primarily for transportation of persons and having a capacity of twelve persons or less.

Amendment to Section  
1955.1, Title 13, California  
Administrative Code

1955.1. Exhaust Emission Standards and Test Procedures --

1975 and Subsequent Model-Year Passenger Cars. (a) The exhaust emissions from new 1975 and subsequent model-year passenger cars having an engine displacement of 50 cubic inches or greater, subject to registration and sold and registered in this state, shall not exceed:

Exhaust Emission Standards  
(grams per mile)

<u>Model-Year</u>	<u>Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Oxides of Nitrogen (NO<sub>2</sub>)</u>
1975	0.9*	9.0	2.0
1976	0.9*	9.0	2.0
1977	0.41	9.0	1.5

\*Hydrocarbon emissions from limited-production passenger cars shall not exceed 1.5 grams per mile.

~~"Limited-production"-vehicle means a new 1975 model-year motor vehicle having a manufacturer's gross vehicle weight rating of under 6,001 pounds that is manufactured or sold in this state in quantities of less than 210 units annually.~~

(b) The test procedures for determining compliance with these standards are set forth in "California Exhaust Emission Standards and Test Procedures for 1975 and Subsequent through 1978 Model Gasoline-Powered Passenger Cars, and Light-Duty Trucks", and Medium-Duty Vehicles", adopted by the Air Resources Board February 19, 1975, as amended March 17, 1975, April 16, 1975, and February 20, 1976, and March 31, 1976.

Amendment to Section 1955.5, Title 13,  
California Administrative Code

1955.5 Exhaust Emission Standards and Test Procedures -

1976 1975 and Subsequent Through 1978 Model-Year Light-Duty Trucks.

- (a) The exhaust emissions from new 1975 and subsequent through 1978 model-year gasoline-powered light-duty trucks having an engine displacement of 50 cubic inches or greater, subject to registration and sold and registered in this state, shall not exceed:

Exhaust Emission Standards  
(grams per mile)

<u>Model Year</u>	<u>Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Oxides of Nitrogen (NO<sub>2</sub>)</u>
1975	2.0	20	2.0
1976	0.9	17	2.0
1977	0.9	17	2.0
1978	0.9	17	2.0

- (b) The standards shown in subdivision (a) above for the 1975 model year shall apply to 1975 and 1976 model "limited-production" light-duty trucks. Definition of "limited-production" shall be the same as in Section 1955.1.
- (c) The test procedures for determining compliance with these standards are set forth in "California Exhaust Emission Standards and Test Procedures for 1975 and Subsequent Through 1978 Model Gasoline-Powered Passenger Cars, and Light-Duty Trucks, and Medium-Duty Vehicles", adopted by the Air Resources Board February 19, 1975, as amended March 17, 1975, April 16, 1975, and February 20, 1976 and March 31, 1976.

"Light-duty-truck"-means-any-motor-vehicle-rated-at-6,000-pounds-gross-vehicle-weight-or-less,-which-is-designed-primarily-for-purpose-of-transportation-of-property-or-is-a-derivative---of-such-a-vehicle,-or-is-available-with-special-features-enabling off-street-or-off-highway-operation-and-use.

Amendments to Section 1956, Title 13,  
California Administrative Code

Amend Section (c) to read:

1956. (c) Exhaust emissions from new 1977 and later model-year gasoline-powered engines for use in heavy-duty motor vehicles (over-6,000-pounds,--~~manufacturer's-maximum-gross-vehicle-weight~~) shall not exceed:

- (1) Hydrocarbons plus oxides of nitrogen (as NO<sub>2</sub>) --  
5 grams per brake horsepower hour
- (2) Carbon monoxide -- 25 grams per brake horsepower hour  
or
- (1) Hydrocarbons -- 1.0 gram per brake horsepower hour
- (2) Carbon Monoxide -- 25 grams per brake horsepower hour
- (3) Oxides of Nitrogen (as NO<sub>2</sub>) -- 7.5 grams per brake  
horsepower hour

These two sets of standards shall be alternatives. A manufacturer shall have the option for each engine family of showing compliance with either set.

The test procedures for determining compliance with these standards are those set forth in "California Exhaust Emission Standards, and Test and Approval Procedures for 1975 and Subsequent Model-Year Gasoline-Fueled Heavy-Duty Engines in Gasoline-Powered-Motor and Vehicles Over-6,000-Pounds- Gross-Vehicle-Weight," dated February 19, 1975, amended April 16, 1975, and July 15, 1975 and March 31, 1976.

Add Section (d) which reads:

1956. (d) Exhaust emissions from new 1978 and subsequent model-year gasoline-fueled heavy-duty engines and vehicles, except medium duty vehicles, shall not exceed:

- (1) Hydrocarbons plus oxides of nitrogen (as NO<sub>2</sub>) --  
5 grams per brake horsepower hour
- (2) Carbon monoxide -- 25 grams per brake horsepower hour

or

- (1) Hydrocarbons -- 1.0 gram per brake horsepower hour
- (2) Carbon Monoxide -- 25 grams per brake horsepower hour
- (3) Oxides of Nitrogen (as NO<sub>2</sub>) -- 7.5 grams per brake horsepower hour

These two sets of standards shall be alternatives. A manufacturer shall have the option for each engine family of showing compliance with either set.

The test procedures for determining compliance with these standards are those set forth in "California Exhaust Emission Standards and Test Procedures for 1975 and Subsequent Model-Year Gasoline-Fueled Heavy-Duty Engines and Vehicles," dated February 19, 1975, amended April 16, 1975, July 15, 1975, and March 31, 1976.

A manufacturer may elect to certify heavy-duty vehicles less than 10,000 pounds maximum gross vehicle weight rating as medium-duty vehicles under Section 1959 of this Chapter, in which event heavy-duty emission standards and test procedures will not apply.

Amendments to Section 1957, Title 13,  
California Administrative Code

Amend Section (c) to read:

1957. (c) Exhaust emissions from new 1977 and later model-year diesel-powered engines for use in heavy-duty motor vehicles (over-6,000-pounds;--manufacturer's-maximum-gross-vehicle-weight) shall not exceed:

(1) Hydrocarbons plus oxides of nitrogen (as NO<sub>2</sub>) -- 5 grams per brake horsepower hour

(2) Carbon monoxide -- 25 grams per brake horsepower hour

or

(1) Hydrocarbons -- 1.0 gram per brake horsepower hour

(2) Carbon Monoxide -- 25 grams per brake horsepower hour

(3) Oxides of Nitrogen (as NO<sub>2</sub>) -- 7.5 grams per brake horsepower hour

These two sets of standards shall be alternatives. A manufacturer shall have the option for each engine family of showing compliance with either set.

The test procedures for determining compliance with these standards are those set forth in "California Exhaust Emission Standards, and Test and Approval Procedures for 1975 and Subsequent Model-Year Diesel-Fueled Heavy-Duty Engines in Diesel-Powered Motor and Vehicles Over-6,000-Pounds-Gross-Vehicle-Weight," dated December 19, 1973, amended August 8, 1974, April 16, 1975, and July 15, 1975 and March 31, 1976.

Add Section (d) which reads:

1957. (d) Exhaust emissions from new 1978 and subsequent model-year diesel-fueled heavy-duty engines and vehicles, except medium-duty vehicles, shall not exceed:

(1) Hydrocarbons plus oxides of nitrogen (as NO<sub>2</sub>) -- 5 grams per brake horsepower hour

(2) Carbon monoxide -- 25 grams per brake horsepower hour

or

- (1) Hydrocarbons -- 1.0 gram per brake horsepower hour
- (2) Carbon Monoxide -- 25 grams per brake horsepower hour
- (3) Oxides of Nitrogen (as NO<sub>2</sub>) -- 7.5 grams per brake horsepower hour

These two sets of standards shall be alternatives. A manufacturer shall have the option for each engine family of showing compliance with either set.

The test procedures for determining compliance with these standards are those set forth in "California Exhaust Emission Standards and Test Procedures for 1975 and Subsequent Model-Year Diesel-Fueled Heavy-Duty Engines and Vehicles," dated December 19, 1973, amended August 8, 1974, April 16, 1975, July 15, 1975, and March 31, 1976.

A manufacturer may elect to certify heavy-duty vehicles less than 10,000 pounds maximum gross vehicle weight rating as medium-duty vehicles under Section 1959 of the Chapter, in which event heavy-duty emission standards and test procedures will not apply.

Addition of Section 1959, Title 13,  
California Administrative Code1959. Exhaust Emission Standards and Test Procedures - 1978 Model  
Medium-Duty Vehicles.

- (a) The exhaust emissions from new 1978 medium-duty vehicles having an engine displacement of 50 cubic inches or greater, subject to registration and sold and registered in this state, shall not exceed:

<u>Exhaust Emission Standards</u> (grams per mile)			
<u>Model Year</u>	<u>Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Oxides of Nitrogen (NO<sub>2</sub>)</u>
1978	0.9	17	2.3

- (b) The test procedures for determining compliance with these standards are set forth in "California Exhaust Emission Standards and Test Procedures for 1975 Through 1978 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles", adopted by the Air Resources Board February 19, 1975, as amended March 17, 1975, April 16, 1975, February 20, 1976, and March 31, 1976.



State of California

AIR RESOURCES BOARD

Resolution 76-17

March 30, 1976

WHEREAS, several research proposals have been submitted to the Air Resources Board in response to the Board's request for proposals entitled "Control of Hydrocarbon Emissions from Stationary Sources in the South Coast Air Basin" issued in September 1975;

WHEREAS, the Research Screening Committee has carefully reviewed and evaluated these proposals; and

WHEREAS, the Research Screening Committee has recommended for funding the proposal:

ARB Proposal Number 501-34 submitted by KVB Engineering, Inc.  
entitled "Control of Hydrocarbon Emissions from Stationary Sources  
in the South Coast Air Basin" in the amount of \$499,880;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board hereby approves the proposal:

ARB Proposal Number 501-34 submitted by KVB Engineering, Inc.  
entitled "Control of Hydrocarbon Emissions from Stationary Sources  
in the South Coast Air Basin" in the amount of \$499,880,

and authorizes the Executive Officer to initiate administrative procedures and to execute all necessary documents and contracts for the research effort proposed in an amount not to exceed \$499,880.

State of California  
AIR RESOURCES BOARD

Resolution 76-18

April 12, 1976

WHEREAS, Health and Safety Code Section 41500 requires the Board to review the rules and regulations and enforcement practices of the districts to determine whether reasonable action is being taken to achieve and maintain the state ambient air quality standards.

WHEREAS, Health and Safety Code Section 41505 provides that if, after a public hearing, the state board finds that a district is not taking reasonable action to enforce the statutory provisions, rules, and regulations relating to air quality in such a manner that will likely achieve and maintain the adopted ambient air quality standards, the state may exercise any of the powers of that district to achieve and maintain such ambient air quality standards;

WHEREAS, the Board has reviewed Rule 463 of the Southern California Air Pollution Control District and the enforcement practices of the district with respect to said rule;

WHEREAS, the Board finds that the district's activities to enforce Rule 463 will not likely achieve and maintain the state ambient air quality standards in that

- a) the district's criteria for determining the existence or nonexistence of a violation are inadequate.
- b) the district's inspectors have not regularly descended onto tank roofs, which action is necessary to observe and measure gaps and openings, and
- c) inspections in February and March of this year by the Board's staff at refinery sites in El Segundo (Standard Oil of California), Wilmington (Texaco), Torrance (Mobil) and Carson (ARCO) have revealed numerous tanks in violation of provision (a)(1) of Rule 463, which violations have likely existed for many months prior thereto without enforcement action being taken by the district;

WHEREAS, the Board finds that Rule 463, which provides that seals shall "close the space" between the tank top and wall, means no measurable gap.

WHEREAS, the Board finds that Rule 463, which provides that all gauging and sampling ports or devices shall be "gas-tight", means no measurable or visible gaps or openings;

WHEREAS, the Board has held a public hearing in accordance with Health and Safety Code Section 41502;

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby assumes the powers of the Southern California Air Pollution Control District to enforce Rule 463 of the district, including but not limited to the conduct of inspections, the issuance of citations and complaints for violations, and the issuance of abatement orders, such exercise to be concurrent and not preemptive with the district's exercise of such powers;

BE IT FURTHER RESOLVED, that pursuant to the authority provided in Health and Safety Code Section 39515, the Board delegates to the Executive Officer the powers and duties assumed by the Board in the preceeding paragraph;

BE IT FURTHER RESOLVED, that the Executive Officer is hereby delegated the authority to terminate the Board's exercise of the enforcement powers of the Southern California Air Pollution Control District when he determines that the District's enforcement program regarding storage of organic liquids is adequate.

State of California  
AIR RESOURCES BOARD  
Resolution 76-19  
April 28, 1976

WHEREAS, Section 39601 of the Health and Safety Code authorizes the Air Resources Board to adopt standards, rules, and regulations necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law;

WHEREAS, Sections 43101 and 43104 of the Health and Safety Code authorize the Board to adopt exhaust emission standards in order to control or eliminate air pollution caused by motor vehicles;

WHEREAS, the Board has previously found that the exhaust emission standards for 1977 model passenger cars were necessary, technologically feasible, and cost-effective, and has received more recent data which confirm these findings and justify their extension to the 1978 model year; and

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of the Administrative Procedure Act (Government Code, Title 2, Division 3, Part 1, Chapter 4.5);

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby adopts exhaust emission standards and test procedures for 1978 model passenger cars by amending Section 1955.1, Chapter 3, Title 13 of the California Administrative Code, to read as follows:

1955.1. Exhaust Emission Standards and Test Procedures--  
1975 Through 1978 Model Year Passenger Cars.

(a) The exhaust emissions from new 1975 through 1978 model-year gasoline-fueled passenger cars having an engine displacement of 50 cubic inches or greater, subject to registration and sold and registered in this state, shall not exceed:

Exhaust Emission Standards  
(grams per mile)

<u>Model Year</u>	<u>Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Oxides of Nitrogen (NO<sub>2</sub>)</u>
1975	0.9*	9.0	2.0
1976	0.9*	9.0	2.0
1977	0.41	9.0	1.5
1978	0.41	9.0	1.5

\*Hydrocarbon emissions from limited-production passenger cars shall not exceed 1.5 grams per mile.

(b) The test procedures for determining compliance with these standards are set forth in "California Exhaust Emission Standards and Test Procedures for 1975 through 1978 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles," adopted by the Air Resources Board February 19, 1975, as amended March 17, 1975, April 16, 1975, February 20, 1976, March 31, 1976, and April 28, 1976.

BE IT FURTHER RESOLVED, that the Board adopts the "California Exhaust Emissions Standards and Test Procedures for 1975 Through 1978 Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles," as amended April 28, 1976.

State of California

AIR RESOURCES BOARD

May 28, 1976

Resolution 76-20

WHEREAS, the Air Resources Board, by direction of the Governor in Executive Order No. B-6-75 and pursuant to Administrative Order No. 75-2, issued jointly by the Air Resources Board and the Office of Emergency Services, has adopted the California Air Pollution Emergency Plan;

WHEREAS, the Air Resources Board is the state agency charged with the responsibility to prepare, direct and execute the Air Pollution Emergency Plan;

WHEREAS, the Air Pollution Emergency Plan prescribes areas that are subject to the provision of the Plan;

WHEREAS, the Air Resources Board has evaluated air quality data and determined that additional areas need to be included in the Plan;

WHEREAS, the Air Pollution Emergency Plan prescribes that other pollutants will be added when data are sufficient for establishment of criteria;

WHEREAS, in response to the recommendations of the Department of Health, the Air Resources Board on February 20, 1976, adopted a critical harm level for ambient sulfate at  $25 \text{ ug/m}^3$ , 24 hour average;

WHEREAS, a revision of the Air Pollution Emergency Plan is necessary to append additional health advisory information and to provide conformity in other wording;

WHEREAS, the Air Resources Board has complied with all public hearing and notice requirements of state and federal law;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board does hereby amend the Air Pollution Emergency Plan, as revised May 28, 1976, as shown in the attached California Air Pollution Emergency Plan.

# CALIFORNIA AIR POLLUTION EMERGENCY PLAN

Adopted: November 13, 1973  
Revised: August 15, 1974  
December 12, 1974  
March 18, 1975  
April 17, 1975  
May 15, 1975  
June 12, 1975  
August 20, 1975  
September 29, 1975  
October 21, 1975  
May 28, 1976

*The material in italics was not adopted on May 28, 1976. The Board has scheduled a workshop to be held on June 23, 1976 on this material and methods for predicting sulfate episodes.*

AIR RESOURCES BOARD

CALIFORNIA AIR POLLUTION  
EMERGENCY PLAN

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Appendix A. Actions for Air Pollution Disasters

Appendix B. Personal Protective Actions During Air Pollution  
Episodes

1. Oxidant or Oxidant in Combination with Sulfur  
Dioxide
2. Carbon Monoxide
3. Sulfur Dioxide or Sulfate



# CALIFORNIA AIR POLLUTION EMERGENCY PLAN

## I. INTRODUCTION

The California Air Pollution Emergency Plan sets forth the legal basis for taking action to prevent air pollution concentrations from reaching levels which could endanger or cause significant harm to the public health, or to abate such concentrations should they occur.

The air quality in some areas of the State frequently does not meet the quality prescribed by ambient air quality standards applicable in California. A potential exists for air pollution in these areas to reach concentrations at which emergency actions are necessary to protect the public health. The Plan is applicable in these areas.

Under the Plan, local air pollution control districts (APCDs) have the primary responsibility for preparing detailed plans in accordance with the guidelines set forth in this plan, and for implementing such plans as necessary. If an episode should be so severe that it is beyond the local APCD's capability to control, the State shall take action to alleviate the condition under the appropriate provisions of this Plan which is a part of the State Peacetime Emergency Plan developed pursuant to the Emergency Services Act.

Nothing in the Plan shall preclude local APCDs from implementing episode response programs required by local air pollution emergency regulations.

## II. AUTHORITIES

- A. Part 4, Division 26 of the Health and Safety Code, as amended.
- B. California Emergency Services Act.
- C. Executive Order No. B-6-75
- D. Administrative Order No. 75-2

### III. AREAS OF APPLICABILITY

The areas and the pollutants for which the Plan is applicable are shown in Table I. The areas listed are the minimum areas the Plan covers. Other areas can be added by the Air Resources Board (ARB) or by the local APCD having jurisdiction in the respective area. Other pollutants will be added when data are sufficient for establishment of criteria. Areas of applicability for the additional pollutants will also be designated.

TABLE I  
AIR POLLUTION CONTROL DISTRICTS AND  
CONTAMINANTS TO WHICH THE AIR POLLUTION  
EMERGENCY PLAN IS APPLICABLE

Area	Carbon Monoxide	Oxidant	Sulfur Dioxide	Sulfates
Bay Area APCD	X	X	X	X
Monterey Bay Unified APCD		X		
Ventura County APCD, the Southern California APCD and the South Coast Air Basin portion of the Santa Barbara County APCD	X	X	X	X
San Diego County APCD	X	X		X
Sacramento County and Yolo-Solano APCDs	X	X		
Fresno, Kern, Tulare, San Joaquin, Kings, Madera, Merced, and Stanislaus County APCDs	X	X		

## IV. EPISODE STAGES

### AND AIR POLLUTION DISASTERS

Listed below in order of increasing air pollution severity are the episode stages at which specific actions are required.

#### A. Stage 1 Episode

A Stage 1 episode is declared when the concentration of pollutants specified for this stage is predicted or reached. Persons with respiratory or coronary artery disease should be notified to take precautions against exposure. Schools should be notified so they can curtail students' participation in strenuous activities. First steps in abatement action plans shall be undertaken.

#### B. Stage 2 Episode

A Stage 2 episode is declared when the concentration of pollutants, specified for this stage is predicted or reached. Abatement actions shall be taken with a minimum of delay to reduce the concentration of the pollutant at issue.

This is an intermediate stage. Abatement actions needed will vary depending on circumstances; e.g., maximum concentrations and duration.

#### C. Stage 3 Episode

A Stage 3 episode is declared when the conditions specified for this stage are predicted or reached. Extensive actions shall be taken to prevent exposure of people to pollutant concentrations of the indicated levels.

#### D. Air Pollution Disaster (State of Emergency)

When it is determined by medical authorities or local officials that a substantial number of persons are suffering or are to suffer incapacitating effects from air pollution, regardless of measured pollutant concentrations, and analysis of meteorological and air quality data by the ARB or an APCD indicates that the condition is likely to continue, or recur, the Chairman of the ARB (the Secretary of the Environmental Quality Agency if and when established) shall confer with the Director of the Office of Emergency Services (OES) and they shall jointly recommend to the Governor that an air pollution disaster (State of Emergency) be declared.

#### E. Episode Termination

An episode is terminated whenever the concentration of the pollutant(s) which causes the declaration of such episode has been verified to have fallen below the criteria level for the declaration of the episode, and analysis of meteorological and air quality data indicates that the pollutant concentration is expected to decrease.

## V. EPISODE STAGE CRITERIA

The concentrations of air pollutants at which the various episode stages are declared are given in Table II.

TABLE II  
EPISODE CRITERIA LEVELS

	Averaging Time	Stage 1	Stage 2	Stage 3
Oxidant, as Ozone	1 Hour	0.20 ppm	0.35 ppm	0.50 ppm
Oxidant, in Combination with Sulfur Dioxide	1 Hour	0.20 ppm*	0.35 ppm*	0.50 ppm*
Carbon Monoxide	1 Hour	40 ppm	75 ppm	100 ppm for one hour and predicted to persist for one additional hour
	12 Hours	20 ppm	35 ppm	50 ppm
Sulfur Dioxide	1 Hour	0.5 ppm	1.0 ppm	2.0 ppm
	24 Hours	0.2 ppm	0.7 ppm	0.9 ppm

  

Sulfate, in Combination with Oxidant	24 Hours (Sulfate)	25 $\mu\text{g}/\text{m}^3$
	1 Hour (Oxidant)	0.20 ppm

\*These levels shall apply when the oxidant concentration exceeds 0.10 ppm and shall be determined by adding the oxidant and sulfur dioxide concentrations.

If excessive concentrations of pollutants for which criteria have not been established occur or are predicted to occur, appropriate abatement actions shall be taken by the affected APCD after consultation with the ARB.

## VI. DIVISION OF RESPONSIBILITY

### A. Prediction of Episode Conditions

The ARB shall provide advisory notices of probable episodes to the APCDs. These notices will include air quality predictions based upon analysis of meteorological and ambient air quality data. The local APCDs may supplement this information with data from their own facilities or from contract sources.

### B. Declaration of Episode Conditions

Based upon the prediction of episode conditions, or the attainment of episode criteria levels, air pollution episodes shall be declared by the following:

1. Local air pollution control authorities; or
2. The ARB; if the affected APCD fails to declare an episode immediately, and the ARB after consultation with the APCD, determines that an episode is predicted or exists.

### C. Responsibility for Abatement Actions

#### 1. APCD Responsibility

##### a. Stages 1 and 2 Episodes

The APCDs in the areas of applicability shall adopt the necessary rules and regulations to implement the Plan. The rules and regulations shall include episode criteria such as specified in Table II, Section V; a health advisory developed with the assistance of appropriate medical committees; and the basic program described in Section VII, except for meteorological support, and Section VIII, where appropriate.

##### b. Stage 3 Episode

When it is determined that conditions for this stage are predicted or reached, the local APCD shall take all actions within its authority, in accordance with its rules and regulations, to prevent or abate the episode. If further action is necessary, the appropriate official of the APCD may, after consulting with and receiving advice from the ARB, request the Governor to take action in accordance with the Emergency Services Act.

## 2. ARB Responsibility

If an APCD does not take reasonable action to abate an episode, the ARB shall hold a public hearing to consider enforcement of the appropriate provisions of the APCD's Regulations, in accordance with Sections 41502, 41504 and 41505 of Part 4, Division 26 of the Health and Safety Code. If the ARB finds it necessary, the ARB shall enforce the appropriate provisions of the APCD's Regulations until a further hearing establishes that responsibility for such enforcement should be returned to the APCD.

### D. Air Pollution Disaster

If a State of Emergency is declared by the Governor in accordance with the Emergency Services Act the OES shall implement the appropriate portions of this plan and other relevant portions of the State Peacetime Emergency Plan, with the local APCDs and the ARB assisting in control action.

### E. Termination

A Stage 1, Stage 2, or Stage 3 episode can be terminated only by the agency that declared it. A State of Emergency (air pollution disaster) can be terminated only by the Governor or his authorized representative.

### F. Establishment of Criteria

The Executive Officer of the ARB shall establish minimum criteria for approval of abatement plans and may establish such other administrative criteria as he deems appropriate to accomplish the objectives of this plan.

## VII. EMERGENCY PLAN

- A. Each APCD shall adopt a plan for the prevention and amelioration of air pollution episodes. Such plans shall be part of the APCD rules and regulations. These rules and regulations shall be submitted to the ARB for approval within 45 days of the adoption of this plan.

### 1. Abatement Plans

Emission control plans shall consider two possible episode conditions: 1) an episode has already occurred, and 2) an episode is predicted. The plans shall include abatement methods for both stationary and mobile sources.

Control actions to be imposed will be commensurate with the nature, severity and geographical extent of the episode.

- a. **Stationary Source Curtailment Plans** - In each APCD where the Plan is applicable, there shall be local plans for the immediate curtailment of emissions from industrial, business, or commercial establishments or other activities that may emit 100 tons/year or more of hydrocarbons or any pollutant included in the Plan. The plans shall include identification of sources, location of sources, information on estimated emissions in terms of both quantity and nature of each pollutant, the number of fleet vehicles, designation of a person to contact in case curtailment is necessary, and a shutdown procedure including the time required to effect the shutdown. Copies of the plans shall be made available to the ARB. All electrical utilities that file plans for energy conservation, load reduction or load shedding plans with the Public Utilities Commission or the Energy Resources Conservation and Development Commission shall file copies of such plans with the appropriate APCDs and with the ARB.
- b. **Traffic Abatement Plan** - In each APCD where the Plan is applicable, there shall be local plans for the immediate abatement of motor vehicle traffic in the event of an air pollution episode. The plans shall include specific actions to be taken at each episode stage. The plans shall be directed toward reducing the causes for vehicular traffic but may include direct traffic control.

Abatement plans shall be prepared by industrial, business and commercial establishments and shall be reviewed by the APCD according to the criteria established by order of the ARB Executive Officer. Abatement plans shall be prepared by the source facility and be submitted to the APCD within 45 days after notification that such plans are required. The plans shall be reviewed by the APCD within an additional 45 days and

approved or disapproved. If a plan is disapproved, the plan shall be revised by the applicant and resubmitted to the APCD within 30 days of notice of disapproval. If the required plan is not submitted within the above time limit, the applicant shall be considered to be in violation of the APCD's Rules and Regulations.

## 2. Source Inspection Plans

Each APCD shall prepare plans for inspection of sources subject to mandatory curtailment to assure compliance and to determine effects of curtailment.

## 3. Notification Procedures

In each APCD, there shall be procedures established for notifying the following when an episode has been declared.

- a. The ARB
- b. Local and state law enforcement agencies
- c. Public safety personnel, who have responsibilities for or interests in air pollution control
- d. Sources specified in the curtailment plans
- e. The news media
- f. APCD personnel
- g. The APCD Emergency Action Committee (if one is appointed)
- h. Local public health officials and hospitals
- i. School officials
- j. Other APCDs within the same basin (notification may be limited to those APCDs where the plan is applicable)
- k. Appropriate elected officials

The notice of declaration of an episode shall include the following:

- a. Stage level and predicted duration
- b. Estimated boundary of affected area
- c. Pollutants for which the episode is declared

## 4. Sampling Stations

In each APCD where the Plan is applicable, there shall be one or more permanently located atmospheric sampling stations



equipped to monitor the contaminants covered by the Plan in that APCD. Sampling station locations shall be designated by the local APCD with the concurrence of the ARB. These stations shall be equipped with monitoring instruments operated in a manner that will provide for measurement of contaminant concentrations in the range of values specified in the episode criteria. Additional temporary, fixed, or mobile sampling stations may be maintained and activated as deemed necessary by the APCD or ARB in an applicable area. Analytical procedures shall be in conformance with the ARB standard methods. Any procedure which can be shown to the satisfaction of the ARB to give equivalent results may also be used. The ARB shall provide calibration services as required.

## 5. Meteorological Support

When deemed necessary by the ARB, the ARB shall provide for the acquisition of meteorological information in any area of the State. Any APCD may provide such services in addition to the state services.

### B. Emergency Action Committee

Each local emergency plan may provide for the appointment of an Emergency Action Committee. If appointed, the Committee shall include among the members the Health Officer, Sheriff, County Counsel, County OES and other officials of the affected counties and may include representatives of the ARB or the State OES for liaison purposes. The committee shall act in an advisory capacity to the air pollution control officer (APCO) in regard to the appropriate actions to be taken whenever an episode level is reached. The APCO shall implement abatement actions as may be necessary, and shall inform the ARB of his action.

### C. Interdistrict Coordination

Emissions from sources located in one APCD may contribute to the occurrence of air pollution emergency episodes in another APCD within the same air basin. The basinwide coordinating council in each air basin where this Plan is applicable shall adopt as a part of its air pollution control plan, procedures to coordinate the emergency action of those APCDs included in the emergency action plan. Upon the request of an APCO who has declared an air pollution episode, adjacent APCDs shall take the action previously specified by the Coordinating Council and such other actions as appropriate to expedite abatement of the episode.

In the absence of approved procedures for interdistrict coordination, or in the absence of approved procedures for interbasin coordination, the following procedures shall apply:

1. Whenever an APCD or the ARB has declared an air pollution episode and determined that an adjacent APCD is or will be a source area contributing to the episode, the source district shall be requested to take appropriate response action.
2. If after one hour of being notified by the receptor area APCD or by the ARB, and if the source area APCD concludes that some or all of the requested actions are inappropriate, the source area APCD shall contact the ARB for relief from implementing actions that are considered inappropriate.
3. The ARB, within one hour after being so requested, shall advise the source area APCD on what actions must be taken.

## VIII. EPISODE ACTIONS

### A. Advisory of High Air Pollution Potential

Upon determination that a high potential for deteriorating air quality exists in an area as a result of either an ARB analysis or the advice of an APCD staff, the ARB shall inform all affected APCDs of this condition. The operators of the monitoring stations shall be alerted to the potential by the appropriate APCD.

### B. Predicted or Observed Air Pollution Episodes

Actions for each episode stage of each pollutant covered by the Plan are to be taken at the direction of the APCD or the ARB Chairman in accordance with those listed in 1-4 below. Actions in addition to those listed may be required, as appropriate.

#### 1. Oxidant Episodes

##### a. Stage 1

The following general actions shall be taken in the affected area upon the declaration of this stage:

- (1) Issue health warnings, in accordance with Appendix B-1, to sensitive persons in receptor areas.
- (2) Advise schools that strenuous activities by students must be discontinued. This action may be limited to outdoor activities.
- (3) Notify officials, news media and organizations listed in Section VII. A.3.
- (4) Abatement Actions
  - (a) Initiate actions to reduce vehicular traffic, including carpooling, appropriate to the episode.
  - (b) Implement the APCD stationary source curtailment plans, appropriate to the episode.
  - (c) Curtail the use of some paint spray booths, vapor degreasers and other hydrocarbon emitting equipment.

##### b. Stage 2

The following general actions, in addition to the actions taken at Stage 1, shall be taken in the affected area upon the declaration of this stage:

- (1) Issue health warning, in accordance with Appendix B-1, to sensitive persons and those displaying reaction symptoms.
- (2) Suspend programs which involve physical exertion by participants using public parks or public recreational facilities. Such programs which are for adult participants in scheduled athletic events with paid attendance are excepted.
- (3) Administrative Actions
  - (a) Notify officials, news media and organizations listed in Section VII. A. 3.
  - (b) Meteorological and air quality data shall be continuously monitored and evaluated until the episode is terminated.
  - (c) Upon notification by an APCD in the affected area that the pollutant concentration has reached Stage 2, the Executive Officer of the ARB shall activate the ARB emergency action staff and notify OES.
  - (d) If an APCD administers this program, the ARB shall be informed at each third increment of the concentration difference between Stages 2 and 3.
- (4) Abatement Actions
  - (a) Prohibit burning of combustible refuse at any location within the affected area.
  - (b) Implement the APCD traffic curtailment plan, appropriate to the episode. Such plans shall include extensive carpooling or use of mass transportation by the public.
  - (c) Implement the APCD stationary source curtailment plans, appropriate to the episode. Advise affected industries to prepare for possible shutdown.
  - (d) Prohibit petroleum loading and off loading of tankers.
  - (e) *Curtail bulk loading of crude oil and petroleum products with a Reid vapor pressure greater than 1.5 pounds per square inch.*

c. Stage 3

The following general actions, in addition to the actions taken at Stage 1 and Stage 2, shall be taken in the affected area upon the declaration of this stage:

(1) Warnings shall be issued describing protective measures to be taken in accordance with Appendix B-1, including identification of population groups most subject to harm and identification of the type of facilities where persons may be least subjected to exposure.

(2) Administrative Actions

(a) Notify officials, news media, and organizations listed in Section VII. A. 3.

(b) The OES and the ARB shall evaluate actions that have been taken and jointly advise the Governor of the conditions.

(c) Implement the source inspection plans. In the absence of APCD source inspection plans which have been approved by the ARB, the ARB shall be responsible for assuring that specified sources are inspected during an episode.

(3) Abatement Actions

(a) Implement the APCD traffic curtailment plan, appropriate to the episode. Require emergency carpooling or use of mass transportation by the public.

(b) Implement the APCD stationary source curtailment plan, appropriate to the episode.

(c) Ban large scale commercial and industrial spray painting.

(d) Suspend activities, such as roofing, asphalt paving and surface coating where the use of large quantities of volatile organic material is involved.

(e) *Prohibit bulk delivery of gasoline.*

2. Carbon Monoxide Episodes

a. Stage 1

The following general actions shall be taken in the affected area upon the declaration of this stage:

(1) Issue health warning, in accordance with Appendix B-2, to sensitive persons in receptor areas.

(2) Advise schools that strenuous activities by students must be discontinued.

- (3) Notify officials, news media and organizations listed in Section VII. A. 3.
- (4) Abatement Actions
  - (a) Initiate actions to reduce vehicular traffic, including carpooling, appropriate to the episode.
  - (b) Implement the APCD stationary source curtailment plans, appropriate to the episode.
  - (c) Request the public in the area of the episode to avoid unnecessary use of automobiles.

b. Stage 2

The following general actions, in addition to the actions taken at Stage 1, shall be taken in the affected area upon the declaration of this stage:

- (1) Issue health warning, in accordance with Appendix B-2, to sensitive persons and those displaying reaction symptoms.
- (2) Suspend programs which involve physical exertion by participants using public parks or public recreational facilities. Such programs which are for adult participants in scheduled athletic events with paid attendance are excepted.
- (3) Administrative Actions
  - (a) Notify officials, news media and organizations listed in Section VII. A. 3.
  - (b) Meteorological and air quality data shall be continuously monitored and evaluated until the episode is terminated.
  - (c) Upon notification by an APCD in the affected area that the pollutant concentration has reached Stage 2, the Executive Officer of the ARB shall activate the ARB emergency action staff and notify OES.
  - (d) If an APCD administers this program, the ARB shall be informed at each third increment of the concentration difference between Stages 2 and 3.
- (4) Abatement Actions
  - (a) Prohibit burning of combustible refuse at any location within the affected area.

- (b) Implement the APCD traffic curtailment plan, appropriate to the episode. Such plans shall include extensive carpooling or use of mass transportation by the public.
- (c) Implement the APCD stationary source curtailment plans, appropriate to the episode. Advise affected industries to prepare for possible shutdown.
- (d) If the occurrence of this stage for carbon monoxide is determined to have been due to traffic congestion in a specific area, take measures to reduce traffic congestion in that area. If traffic is at a standstill motorists shall be advised, where appropriate and when approved by local law enforcement officials, to turn off engines.
- (e) Request the public in the area of the episode to avoid non-emergency use of automobiles.
- (f) Request the general public to avoid the area of the episode.

c. Stage 3

The following general actions, in addition to the actions taken at Stage 1 and Stage 2, shall be taken in the affected area upon the declaration of this stage:

- (1) Warnings shall be issued describing protective measures to be taken in accordance with Appendix B-2, including identification of population groups most subject to harm and identification of the type of facilities where persons may be least subjected to exposure.
- (2) Administrative Actions
  - (a) Notify officials, news media, and organizations listed in Section VII. A. 3.
  - (b) The OES and the ARB shall evaluate actions that have been taken and jointly advise the Governor of the conditions.
  - (c) The source inspection plans shall be implemented. In the absence of APCD source inspection plans which have been approved by the ARB, the ARB shall be responsible for assuring that specified sources are inspected during an episode.
- (3) Abatement Actions

- (a) Implement the APCD traffic curtailment plan, appropriate to the episode. Required emergency carpooling or use of mass transportation by the public.
- (b) Implement the APCD stationary source curtailment plan, appropriate to the episode.
- (c) Shut down combustion sources of carbon monoxide emissions in the area of the episode.
- (d) Request the public to evacuate the area of the episode.

### 3. Sulfur Dioxide Episodes

#### a. Stage 1

The following general actions shall be taken in the affected area upon the declaration of this stage:

- (1) Issue health warnings, in accordance with Appendix B-3, for sensitive persons in receptor areas.
- (2) Advise schools that strenuous activities by students must be discontinued.
- (3) Notify officials, news media and organizations listed in Section VII. A. 3.
- (4) *Abatement Actions*
  - (a) *Implement the APCD stationary source curtailment plans, appropriate to the episode.*
  - (b) *Request specific sources of sulfur oxides to reduce emissions.*
  - (c) *Require power plants to import additional power from outside the air basin.*
  - (d) *Request commercial and industrial users to reduce consumption of electricity by 15 percent.*
  - (e) *Postpone electrically intensive industrial operations, where feasible.*

#### b. Stage 2

The following general actions, in addition to the actions taken at Stage 1, shall be taken in the affected area upon the declaration of this stage:



- (1) Issue health warnings, in accordance with Appendix B-3, to sensitive persons and those displaying reaction symptoms.
- (2) Suspend programs which involve physical exertion by participants using public parks or public recreational facilities. Such programs which are for adult participants in scheduled athletic events with paid attendance are excepted.
- (3) Administrative Actions
  - (a) Notify officials, news media and organizations listed in Section VII. A. 3.
  - (b) Meteorological and air quality data shall be continuously monitored and evaluated until the episode is terminated.
  - (c) Upon notification by an APCD in the affected area that the pollutant concentration has reached Stage 2, the Executive Officer of the ARB shall activate the ARB emergency action staff and notify OES.
  - (d) If an APCD administers this program, the ARB shall be informed at each third increment of the concentration difference between Stages 2 and 3.

(4) *Abatement Actions*

- (a) *Implement the APCD stationary source curtailment plans, appropriate to the episode. Advise affected industries to prepare for possible shutdown. Fossil fuel fired electrical power plants shall implement measures to reduce sulfur oxide emissions by 33 percent of the emissions existing at the onset of the episode.*
- (b) *Request commercial and industrial users to reduce electrical consumption by 30 percent.*
- (c) *Reduce refinery and chemical plant sulfur dioxide emissions by 20 percent of the emissions existing at the onset of the episode.*
- (d) *Request the public to reduce the use of electricity by 10 percent by reducing lighting, air conditioning appliance use and swimming pool pump use.*
- (e) *Require power plants to use all available natural gas. To the extent that sufficient quantities of natural gas are not available, require power plants to use fuel of 0.1 percent or less sulfur by weight.*

c. Stage 3

The following general actions, in addition to the actions taken at Stage 1 and Stage 2, shall be taken in the affected area upon the declaration of this stage:

- (1) Warnings shall be issued describing protective measures to be taken in accordance with Appendix B-3, including identification of population groups most subject to harm and identification of the type of facilities where persons may be least subjected to exposure.
- (2) Administrative Actions
  - (a) Notify officials, news media, and organizations listed in Section VII. A. 3.
  - (b) The OES and the ARB shall evaluate actions that have been taken and jointly advise the Governor of the conditions.
  - (c) The source inspection plans shall be implemented. In the absence of APCD source inspection plans which have been approved by the ARB, the ARB shall be responsible for assuring that specified sources are inspected during an episode.

(3) Abatement Actions

- (a) *Implement the APCD stationary source curtailment plans, appropriate to the episode. Fossil fuel fired electrical power plants shall implement measures to reduce sulfur oxide emissions by 67 percent of the emissions existing at the onset of the episode.*
- (b) *Request the public to reduce electrical consumption by 67 percent.*
- (c) *Prohibit the use of fuel oil for power production or for industrial uses.*
- (d) *Reduce refinery and chemical plant sulfur dioxide emissions by 33 percent of the emissions at the onset of the episode.*
- (e) *Schedule industrial operations requiring heavy electrical usage to hours other than those of peak electrical demand.*

4. Sulfate Episodes

The following general actions shall be taken in the affected area upon the declaration of a sulfate episode:

- a. Issue health warnings, in accordance with Appendix B-3, to sensitive persons in receptor areas.
- b. Advise schools that strenuous activities by students must be discontinued.
- c. Suspend programs which involve physical exertion by participants using public parks or public recreational facilities. Such programs which are for adult participants in scheduled athletic events with paid attendance are excepted.
- d. Administrative Actions
  - (1) Notify officials, news media and organizations listed in Section VII. A. 3.
  - (2) Meteorological and air quality data shall be continuously monitored and evaluated until the episode is terminated.
  - (3) Upon notification by an APCD in the affected area that the pollutant concentration has been achieved, the Executive Officer of the ARB shall activate the ARB emergency action staff and notify OES.
  - (4) The OES and the ARB shall evaluate actions that have been taken and jointly advise the Governor of the conditions.
  - (5) The source inspection plans shall be implemented. In the absence of APCD source inspection plans which have been approved by the ARB, the ARB shall be responsible for assuring that specified sources are inspected during an episode.

e. *Abatement Actions*

- (1) *Implement the APCD stationary source curtailment plans, appropriate to the episode. Fossil fuel fired electrical power plants shall implement measures to reduce sulfur oxide emissions by 67 percent of the emissions existing at the onset of the episode.*
- (2) *Request the public to reduce electrical consumption by 67 percent.*
- (3) *Require power plants to reduce power generation within the air basin by additional importation of power from outside the air basin.*
- (4) *Prohibit the use of fuel oil of greater than 0.1 percent sulfur by weight for power production or for industrial uses.*

- (5) *Reduce refinery and chemical plant sulfur dioxide emissions by 33 percent.*
- (6) *Schedule industrial operations requiring heavy electrical usage to hours other than those of peak electrical demand.*

5. *Oxidant in Combination with Sulfur Dioxide*

a. *Stage 1*

*Take appropriate abatement actions, and all other actions listed in the Plan for Stage 1 oxidant episodes and for Stage 1 sulfur dioxide episodes.*

b. *Stage 2*

*Take appropriate abatement actions, and all other actions listed in the Plan for Stage 2 oxidant episodes and for Stage 2 sulfur dioxide episodes.*

c. *Stage 3*

*Take appropriate abatement actions, and all other actions listed in the Plan for Stage 3 oxidant episodes and for Stage 3 sulfur dioxide episodes.*

C. **Air Pollution Disasters**

If the Governor declares an air pollution disaster (State of Emergency), the Governor will order the institution of any health protection and abatement actions he considers appropriate. Examples of such abatement actions are given in Appendix A.

## APPENDIX A

### Actions for Air Pollution Disasters

#### A. Administrative Actions

1. The Governor, or his designee will announce that an air pollution disaster exists in a specific area and will proclaim a State of Emergency.
2. The Governor will issue orders and regulations to reduce the health hazard and to implement appropriate abatement actions.
3. Warnings shall be disseminated throughout the affected area, using all available public broadcast facilities. Warning information shall include the identification of the population groups most subject to harm, the air quality conditions, recommended health protection measures and abatement actions ordered by the Governor such as given in Section B, below, and in Appendix B.
4. The ARB and the affected APCDs will continue maximum Stage 3 abatement actions in accordance with the State and local emergency plans and will commit all their available resources to the service of the Governor.

#### B. Abatement Actions

Note: Abatement actions are examples, some of which may be counter-productive if taken inappropriately. Selected actions appropriate to the episode will be taken as necessary.

1. Close admission to all recreation facilities, sporting events, and scheduled entertainment, except motion picture theaters equipped with air conditioning in the receptor areas.
2. Close offices and retail and commercial operations with more than 50 employees. All other businesses shall respond to direct instructions from the air pollution control officer regarding opening or closure.
3. Close schools and colleges.  
  
(Closure of facilities in 1, 2, and 3 is required only for disasters that are predicted to occur the next day. For disasters declared during the day, the facilities are to remain open, solely for serving the people within, if such people are ordered to remain).
4. Ban the operation of motor vehicles except emergency and health care vehicles, vehicles used for transportation of

## APPENDIX B

### PERSONAL PROTECTIVE ACTIONS DURING AIR POLLUTION EPISODES

#### 1. OXIDANT OR OXIDANT IN COMBINATION WITH SULFUR DIOXIDE

The following actions are recommended to be taken by:

- Sensitive persons with chronic lung disease or asthma, the elderly, the chronically ill and the exercising young at Stages 1, 2 and 3.
- Healthy adults who feel effects at Stages 1, 2 and 3.
- The general public at Stage 3.

1. **AVOID STRENUOUS OUTDOOR PHYSICAL ACTIVITY** (athletic activities, jogging, etc.) during an episode. Avoid exertion or excitement which increases your breathing rate and the body's oxygen needs. Plan other diverting activity for the young.
2. **REMAIN INDOORS** until the episode is terminated. Keep doors and windows closed, if possible. (Indoor concentrations of oxidant may be about one-half of the outdoor levels.) Use your air conditioner if you have one, to recirculate indoor air and keep cool. High temperatures may add stress to the pollutant effects. An activated charcoal system can further reduce oxidant levels.
3. **DO NOT SMOKE** (and avoid places where others are smoking). Pollutants from smoking make the health challenge worse!
4. **AVOID AEROSOLS, DUSTS, FUMES, AND OTHER IRRITANTS.** Reduce to a minimum domestic activities, cooking, hobbies or occupations which produce them.
5. **AVOID TRAFFIC CONGESTED AREAS** where pollutants are being generated, if you must be outside.
6. **AVOID CONTACT** with persons suffering from respiratory infections.
7. **PLAN YOUR ACTIVITIES.** During air pollution seasons, listen to forecasts and postpone unnecessary activities on "episode" days. Most "peak values" of oxidant occur between mid-morning and late afternoon, but in Eastern portions of the Los Angeles basin they occur into the evening. Use other hours for your exercise and other outdoor activities. Obtain sufficient rest and sleep.
8. **EXPECT ONSET OR INCREASING SEVERITY OF SYMPTOMS** with Stage 2 or Stage 3 episodes (coughing, wheezing, phlegm, shortness of breath, chest discomfort, pain).
  - Follow your physician's treatment advice or consult him again. Know what medications to use for specific symptoms. Maintain adequate fluid intake.
  - Know the location of your nearest emergency treatment facility in case your doctor advises increased therapy (ventilation assistance, oxygen treatment, etc.).

#### EPISODE CRITERIA LEVELS

	Averaging Time	Stage 1	Stage 2	Stage 3
Oxidant, as Ozone	1 Hour	.20 ppm	.35 ppm	.50 ppm
Oxidant, in Combination with Sulfur Dioxide	1 Hour	.20 ppm*	.35 ppm*	.50 ppm*

\*These levels shall apply when the oxidant concentration exceeds 0.10 ppm and shall be determined by adding the oxidant and sulfur dioxide concentrations.

## APPENDIX B

### PERSONAL PROTECTIVE ACTIONS DURING AIR POLLUTION EPISODES

#### 2. CARBON MONOXIDE

The following actions are recommended:

**FOR SENSITIVE PEOPLE** (At all episode Stages)  
with **CORONARY ARTERY DISEASE** (Angina)  
**OBSTRUCTED LEG ARTERIES** (Claudication)  
**SEVERE ANEMIA**  
**HEART DISEASE OR LUNG DISEASE** (Needing oxygen)  
**FOR THE GENERAL PUBLIC** (At Stages 2 and 3)

\* \* \* \* \*

1. **DO NOT SMOKE** (and avoid places where others are smoking). Pollutants from smoking make the health challenge worse!
2. **AVOID TRAFFIC CONGESTED AREAS** where pollutants are being generated, if you must be outside.
3. **AVOID STRENUOUS PHYSICAL ACTIVITY** (athletic activities, jogging, etc.) during an episode. Avoid exertion or excitement which increases your breathing rate and the body's oxygen needs.
4. **PLAN YOUR ACTIVITIES.** Particularly during fall and winter months when carbon monoxide levels tend to be high, listen to forecasts and reschedule unnecessary activities on "episode" days. Obtain sufficient rest and sleep.
5. **AVOID AEROSOLS, DUSTS, FUMES, AND OTHER IRRITANTS.** Reduce to a minimum domestic activities, cooking, hobbies or occupations which produce them. Avoid unvented heaters, charcoal grills or other sources of carbon monoxide.
6. **WITH STAGE 2 OR STAGE 3 EPISODES – YOU MAY EXPERIENCE THE ONSET OR WORSENING OF SYMPTOMS** (HEADACHE, CHEST DISCOMFORT OR PAIN, SHORTNESS OF BREATH). Follow your physician's treatment advice for these, or consult him again. Know what medications to use for specific symptoms. *If prescribed*, use oxygen inhalation until symptoms subside.
7. **KNOW THE LOCATION** of your nearest emergency treatment facility in case your doctor advises increased therapy (oxygen treatment, ventilation assistance, etc.)

#### EPISODE CRITERIA LEVELS\*

	Averaging Time	Stage 1	Stage 2	Stage 3
CARBON MONOXIDE	1 Hour	40 ppm	75 ppm	100 ppm for one hour
	12 Hours	20 ppm	35 ppm	50 ppm

\*At altitudes above 4,000 feet, health effects are expected to occur at lower concentrations of carbon monoxide.

State of California

AIR RESOURCES BOARD

Resolution 76-21

May 27, 1976

WHEREAS, an unsolicited proposal No. 530-37(a) entitled "Development of a Comprehensive Mathematical Model for Photochemical Air Pollution" has been submitted to the Air Resources Board and

WHEREAS, the proposal has been reviewed and recommended for approval by the Research staff; and

WHEREAS, the Research Screening Committee has recommended for funding the proposal:

ARB Proposal No. 530-37(a) entitled "Development of a Comprehensive Mathematical Model for Photochemical Air Pollution", submitted by Environmental Quality Laboratory California Institute of Technology, in an amount not to exceed \$84,700.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board hereby approves the proposal:

ARB Proposal No. 530-37(a) entitled "Development of a Comprehensive Mathematical Model for Photochemical Air Pollution", submitted by Environmental Quality Laboratory California Institute of Technology, in an amount not to exceed \$84,700,

and authorizes the Executive Officer to initiate administrative procedures and to execute all necessary documents and contracts for the research effort proposed in an amount not to exceed \$84,700.



State of California

AIR RESOURCES BOARD

Resolution 76-23

May 27, 1976

WHEREAS, an unsolicited proposal No. 525-36 entitled "Sulfate Air Quality Management in the South Coast Air Basin" has been submitted to the Air Resources Board and

WHEREAS, The proposal has been renewed and recommended for approval by the Research staff; and

WHEREAS, the Research Screening Committee has recommended for funding:

ARB Proposal No. 525-36 entitled "Sulfate Air Quality Management in the South Coast Air Basin" submitted by the Environmental Quality Laboratory, California Institute of Technology in an amount not to exceed \$125,580,

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board hereby approve:

ARB Proposal No. 525-36 entitled "Sulfate Air Quality Management in the South Coast Air Basin" submitted by the Environmental Quality Laboratory, California Institute of Technology in an amount not to exceed \$125,580,

and authorizes the Executive Officer to initiate administrative procedures and to execute all necessary documents and contracts for the proposed research project in an amount not to exceed \$125,580.

State of California

AIR RESOURCES BOARD

Resolution 76-24

June 25, 1976

WHEREAS, Health and Safety Code Section 41500 requires the Board to review the rules and regulations and enforcement practices of the districts to determine whether reasonable action is being taken to achieve and maintain the state ambient air quality standards;

WHEREAS, Health and Safety Code Section 41504 provides that if, after a public hearing, the State Board finds that the rules and regulations of a district will not likely achieve and maintain the adopted ambient air quality standards, the State Board may establish such rules and regulations as it deems necessary to enable the district to achieve and maintain such ambient air quality standards;

WHEREAS, on May 7, 1976, the Southern California Air Pollution Control District amended Rule 463 of the District's Rules and Regulations;

WHEREAS, the Board finds that the rules and regulations of the District will not likely achieve and maintain the state ambient air quality standard for oxidant and that further amendments to Rule 463, as amended by the District, will enhance the likelihood of the District achieving and maintaining such ambient air quality standard;

WHEREAS, the Board has held a public hearing in accordance with Health and Safety Code Section 41502;

NOW, THEREFORE BE IT RESOLVED, that the Air Resources Board hereby amends Rule 463 of the Southern California Air Pollution Control District to read in entirety as set forth in Exhibit A attached hereto, as amended in accordance with the Board's instructions.

State of California

AIR RESOURCES BOARD

Southern California Air Pollution Control District  
Rule 463. Storage of Organic Liquids

(a) A person shall not place, store or hold in any stationary tank, reservoir or other container of more than 150,000 liters (39,630 gallons) capacity, any organic liquid having a vapor pressure of 77.5 mm Hg (1.5 psi) absolute or greater under actual storage conditions, unless such tank, reservoir or other container is a pressure tank maintaining working pressures sufficient at all times to prevent organic vapor or gas loss to the atmosphere, or is designed and equipped with one of the following vapor loss control devices, properly installed, properly maintained and in operation:

(1) A floating roof, consisting of a pontoon-type, double-deck-type, or internal floating cover that rests on the surface of the liquid contents and is equipped with a closure device or devices between the tank wall and roof edge.

(A) Prior to February 1, 1977, a floating roof installation is subject to all the following specific conditions:

(i) No gap between the tank wall and the roof edge (including the closure device) shall exceed 0.3175 centimeters (1/8 inch) width for an accumulative length on the circumference of the tank, computed by dividing the diameter of the tank in feet, by 6.5.

(ii) The gap between the tank wall and the roof edge (including the closure device) shall in no case exceed 1/2 inch.

(iii) For the purpose of subsection (a)(1)(A) & (B), measurements shall be made with a 0.3175 centimeters (1/8 inch) diameter probe of at least 120 centimeters (3.9 foot) length. No violation shall exist unless the probe reaches liquid surface, without forcing.

(iv) All tank gauging and sampling devices or other appurtenant openings shall be designed to provide a projection into the liquid surface to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal, or lid. The cover, seal, or lid shall be in a closed (i.e. no visible gap) position at all times except when the device or appurtenance is in actual use.

(v) Any emergency roof drain shall be provided with a slotted membrane fabric cover, or equivalent, that covers at least nine-tenths of the area of the opening.

(vi) A floating roof shall not be used if the organic liquid stored has a vapor pressure of 569 mm Hg (11 psi) absolute or greater under actual storage conditions.

(vii) Any internal floating cover container shall not contain organic vapor in the space between the internal pan and fixed roof in a concentration greater than 50 percent of the lower explosive limit property of the organic liquid being stored.

(ii) The gap between the tank wall and the roof edge (including the closure device) shall in no case exceed 1/2 inch.

(iii) For the purpose of subsection (a)(1)(A) & (B), measurements shall be made with a 0.3175 centimeters (1/8 inch) diameter probe of at least 120 centimeters (3.9 foot) length. No violation shall exist unless the probe reaches liquid surface, without forcing.

(iv) All tank gauging and sampling devices or other appurtenant openings shall be designed to provide a projection into the liquid surface to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal, or lid. The cover, seal, or lid shall be in a closed (i.e. no visible gap) position at all times except when the device or appurtenance is in actual use.

(v) Any emergency roof drain shall be provided with a slotted membrane fabric cover, or equivalent, that covers at least nine-tenths of the area of the opening.

(vi) A floating roof shall not be used if the organic liquid stored has a vapor pressure of 569 mm Hg (11 psi) absolute or greater under actual storage conditions.

(vii) Any internal floating cover container shall not contain organic vapor in the space between the internal pan and fixed roof in a concentration greater than 50 percent of the lower explosive limit property of the organic liquid being stored.

(B) Effective February 1, 1977 a floating roof installation is subject to all the following specific conditions:

(i) There shall be no measurable gap between the tank wall and the roof edge (including the closure device). As used in this paragraph, measurable gap means an opening through which a probe of 0.3175 centimeters (1/8 inch) diameter can penetrate without forcing to reach liquid surface.

(ii) All tank gauging and sampling devices or other appurtenant openings shall be designed to provide a projection into the liquid surface to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal, or lid. The cover, seal, or lid shall be in a closed (i.e. no visible gap) position at all times except when the device or appurtenance is in actual use.

(iii) Any emergency roof drain shall be provided with a slotted membrane fabric cover, or equivalent, that covers at least nine-tenths of the area of the opening.

(iv) A floating roof shall not be used if the organic liquid stored has a vapor pressure of 569 mm Hg (11 psi) absolute or greater under actual storage conditions.

(v) Any internal floating cover container shall not contain organic vapor in the space between the internal pan and fixed roof in a concentration greater than 50 percent of the lower explosive limit property of the organic liquid being stored.

(2) A vapor recovery system, consisting of a vapor gathering system capable of collecting all organic vapors and gases discharged, and a vapor disposal system capable of processing such organic vapors and gases so as to prevent their emission to the atmosphere at an efficiency of at least 90 percent by weight. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except when gauging or sampling is actually taking place.

(3) Other equipment of equal efficiency, provided an application for such equipment is submitted to and approved by the Air Pollution Control Officer.

(b) A person shall not place, store or hold in any above-ground stationary tank, or other container of 150,000 liters (39,630 gallons) or less capacity any gasoline unless such tank is equipped with a pressure-vacuum valve which is set to within ten percent of the maximum allowable working pressure of the container or is equipped with conservation controls as indicated in subsection (a).

(c) Exemption:

The provisions of subsection (b) shall not apply to any container of 7,570 liters (2,000 gallons) or less capacity installed and in service prior to January 9, 1976, nor to any container of 950 liters (251 gallons) or less capacity installed on or after January 9, 1976.

(d) Definitions

(1) Efficiency, as used in subsections (a)(2) and (a)(3) compares controlled emissions to those emissions which would

(2) A vapor recovery system, consisting of a vapor gathering system capable of collecting all organic vapors and gases discharged, and a vapor disposal system capable of processing such organic vapors and gases so as to prevent their emission to the atmosphere at an efficiency of at least 90 percent by weight. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except when gauging or sampling is actually taking place.

(3) Other equipment of equal efficiency, provided an application for such equipment is submitted to and approved by the Air Pollution Control Officer.

(b) A person shall not place, store or hold in any above-ground stationary tank, or other container of 150,000 liters (39,630 gallons) or less capacity any gasoline unless such tank is equipped with a pressure-vacuum valve which is set to within ten percent of the maximum allowable working pressure of the container or is equipped with conservation controls as indicated in subsection (a).

(c) Exemption:

The provisions of subsection (b) shall not apply to any container of 7,570 liters (2,000 gallons) or less capacity installed and in service prior to January 9, 1976, nor to any container of 950 liters (251 gallons) or less capacity installed on or after January 9, 1976.

(d) Definitions

(1) Efficiency, as used in subsections (a)(2) and (a)(3) compares controlled emissions to those emissions which would



occur from a fixed or cone roof tank in the same product service without a vapor recovery system. These base line emissions shall be calculated by using the criteria outlined in API Bulletin 2518. Floating roof tank emissions shall be calculated using the criteria contained in API Bulletin 2517 modified by the application of seal factors which consider modern technology of floating roof seals.

(2) The true vapor pressure (psi absolute) of stored liquid product may be determined by using the API nomograph for conversion of Reid Vapor Pressure to true vapor pressure.

(e) Effective dates

(1) The owner or operator of any container subject to subsection (a) of this rule, which is installed on or after June 25, 1976 shall comply with the provisions of subsection (a) at the time of installation.

(2) The owner or operator of any container subject to subsection (a) of this rule that is used exclusively to store petroleum distillates shall be in compliance with the provisions of subsection (a) on June 25, 1976.

(3) The owner or operator of any existing container subject to subsection (a) of this rule [other than oil field storage tanks used exclusively to store crude petroleum with a capacity of 254,000 liters (67,200 gallons) or less, as noted in Section (e)(4)] that is used to store organic liquids other than petroleum distillates and who must alter such container to meet these provisions, shall be in compliance by July 1, 1977, and shall comply with the following increments of progress:

(A) June 1, 1976. Submit to the Air Pollution Control Officer a final control plan which describes, as a minimum, the steps, including a construction schedule, that will be taken to achieve compliance with the provisions of this rule.

(B) August 2, 1976. Negotiate and sign all necessary contracts for emission control systems, or issue orders for the purchase of component parts to accomplish emission control.

(C) September 1, 1976. Initiate on-site construction or installation of emission control equipment as indicated on the construction schedule submitted with the final control plan.

(D) June 1, 1977. Complete on-site construction or installation of emission control equipment as indicated on the construction schedule submitted with the final control plan.

(E) July 1, 1977. Assure final compliance with the provisions of this rule.

(4) The owner or operator of any existing oil field storage tank used exclusively to store crude petroleum with a capacity of 254,000 liters (67,200 gallons) or less subject to subsection (a) of this rule who must alter such container to meet these provisions, shall be in compliance by September 1, 1977, and shall comply with the following increments of progress:

(A) August 1, 1976. Submit to the Air Pollution Control Officer a final control plan which describes, as a minimum, the steps, including a construction schedule, that will be taken to achieve compliance with the provisions of this rule.

(A) June 1, 1976. Submit to the Air Pollution Control Officer a final control plan which describes, as a minimum, the steps, including a construction schedule, that will be taken to achieve compliance with the provisions of this rule.

(B) August 2, 1976. Negotiate and sign all necessary contracts for emission control systems, or issue orders for the purchase of component parts to accomplish emission control.

(C) September 1, 1976. Initiate on-site construction or installation of emission control equipment as indicated on the construction schedule submitted with the final control plan.

(D) June 1, 1977. Complete on-site construction or installation of emission control equipment as indicated on the construction schedule submitted with the final control plan.

(E) July 1, 1977. Assure final compliance with the provisions of this rule.

(4) The owner or operator of any existing oil field storage tank used exclusively to store crude petroleum with a capacity of 254,000 liters (67,200 gallons) or less subject to subsection (a) of this rule who must alter such container to meet these provisions, shall be in compliance by September 1, 1977, and shall comply with the following increments of progress:

(A) August 1, 1976. Submit to the Air Pollution Control Officer a final control plan which describes, as a minimum, the steps, including a construction schedule, that will be taken to achieve compliance with the provisions of this rule.

(B) October 2, 1976. Negotiate and sign all necessary contracts for emission control systems, or issue orders for the purchase of component parts to accomplish emission control.

(C) November 1, 1976. Initiate on-site construction or installation of emission control equipment as indicated on the construction schedule submitted with the final control plan.

(D) August 1, 1977. Complete on-site construction or installation of emission control equipment as indicated on the construction schedule submitted with the final control plan.

(E) September 1, 1977. Assure final compliance with the provisions of this rule.

(5) The owner or operator of any container subject to subsection (b) of this rule which is installed on or after June 25, 1976 shall comply with the provisions of subsection (b) at the time of installation.

(6) The owner or operator of any container subject to subsection (b) of this rule which was operating or in the process of being installed or constructed before June 25, 1976 shall be in compliance with the requirements of subsection (b) by August 1, 1976.

State of California  
AIR RESOURCES BOARD

Resolution 76-25

June 24, 1976

WHEREAS, Section 43000 (c) of the Health and Safety Code states that California has a responsibility to establish uniform procedures for compliance with standards which control or eliminate air pollution;

WHEREAS, Section 43000 (e) of the Health and Safety Code states that vehicle emission standards applied to new motor vehicles are standards with which all such vehicles shall comply;

WHEREAS, Section 43210 of the Health and Safety Code authorizes the Air Resources Board to conduct testing of motor vehicles on factory assembly lines or in such manner as the Board determines best suited to carry out the purpose of Part 5, Division 26 of the Health and Safety Code; and

WHEREAS, a public hearing and other proceedings have been held in accordance with the provisions of the Administrative Procedure Act (Government Code, Title 2, Division 3, Part I, Chapter 4.5);

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby amends its regulations in Chapter 3, Title 13, California Administrative Code as attached;

BE IT FURTHER ORDERED AND RESOLVED, that the "California New Vehicle Compliance Test Procedures," dated June 24, 1976, are hereby adopted; and

BE IT FURTHER ORDERED AND RESOLVED, that these amendments shall be effective commencing with the 1977 model year, as designed by each manufacturer, and that the regulations in effect prior to these amendments shall remain in effect for the 1976 model year.

ATTACHMENT

Amendments to Chapter 3, Title 13  
California Administrative Code

1. Amend Section 1900 (a) to read:
  - (a) The definitions set forth in Chapter 2 (commencing with Section 39010), Part 1, Division 26 of the Health and Safety Code, and the definitions set forth in the applicable model-year new vehicle certification and assembly-line test procedures adopted in this Chapter shall govern the provisions of this chapter and are hereby incorporated by reference.
2. Add Sections 1900 (b) (6) and 1900 (b) (7) which read:
  - (6) "Recall" means:
    - (A) The issuing of notices directly to consumers that vehicles in their possession or control should be corrected, and/or
    - (B) Efforts to actively locate and correct vehicles in the possession or control of consumers.
  - (7) "Subgroup" means a set of vehicles within an engine family distinguishable by characteristics contained in the manufacturer's application for certification.
3. Delete Section 2100.
4. Renumber Section 2101 as new Section 2100.
5. Delete Sections 2102, 2103, 2104, and 2105.
6. Add a new Section 2101 which reads:
  2101. Compliance Testing and Inspection - Vehicle Selection, Evaluation, and Enforcement Action.
    - (a) The Executive Officer may, with respect to any vehicle being sold, offered for sale, or manufactured for sale in California, order a vehicle manufacturer to make available for inspection and/or compliance testing a reasonable number of vehicles, and may direct that the vehicles be delivered to the Board

at its laboratory, 9528 Telstar Avenue, El Monte, California. Vehicles shall be selected at random from sources specified by the Executive Officer according to a method approved by him, which insofar as practical shall exclude (1) vehicles manufactured pursuant to the specific order of an ultimate purchaser or (2) vehicles the selection of which, if not excluded, would result in an unreasonable disruption of the manufacturer's distribution system.

A subgroup may be selected for compliance testing only if the Executive Officer has reason to believe that the emission characteristics of that subgroup are substantially in excess of the emissions of the engine family as a whole.

- (b) If the vehicles are selected for compliance testing, the selection and testing of vehicles and the evaluation of data will be made in accordance with the "California New Vehicle Compliance Test Procedures", adopted by the Board on June 24, 1976.
- (c) If the Executive Officer determines, in accordance with the "California New Vehicle Compliance Test Procedures", that an engine family, or any subgroup within an engine family, exceeds the emission standards for one or more pollutants, he shall notify the manufacturer and may invoke Section 2109. Prior to invoking Section 2109, the Executive Officer shall consider quality audit test results and any additional test data or other information provided by the manufacturer.
- (d) If any vehicle selected for inspection fails to conform to any applicable law in Part 5, commencing with Section 43000, Division 26 of the Health and Safety Code, or any regulation adopted by Board pursuant thereto, other than an emissions standard applied to new vehicles to determine "certification" as specified in Subchapter 1, Article 2 of this code and an assembly-line test procedure specified in Subchapter 2, Article 1 of this code, the Executive Officer shall notify the manufacturer and may invoke Section 2109. Prior to invoking Section 2109, the Executive Officer shall consider any information provided by the manufacturer.

## California New Vehicle Compliance Test Procedures

These procedures are applicable commencing with the 1977 model year, to any engine family or any subgroup within an engine family selected for compliance testing pursuant to Section 2101 of Title 13, California Administrative Code.

Test procedure I shall apply to any engine family (or subgroup) if the engine family is evaluated according to quality audit test procedure Option I (90% pass rate) during assembly-line testing.

Test procedure II shall apply to any engine family (or subgroup) if the engine family is evaluated according to quality audit test procedure Option II (average emissions) during assembly-line testing.

All testing shall be conducted in accordance with the applicable model year certification emission test procedures. Mileage accumulation before testing may be performed on test vehicles to the same extent as mileage accumulation is performed on on assembly-line quality audit test vehicles. No mileage accumulation or modifications, adjustments, or special preparation or maintenance will be allowed on vehicles chosen for compliance testing without the written consent of the Executive Officer, which consent shall not be unreasonably withheld where such adjustment or alteration is required to conform the vehicle to the manufacturer's written instructions for predelivery preparation.

### Test Procedure I

Vehicles shall be randomly chosen from the selected engine family or subgroup. Each chosen vehicle shall be tested once to determine whether or not it fails the standards for one or more pollutants. If the manufacturer has previously implemented the retest option during the assembly-line testing of the selected engine family or subgroup, he may implement the same option during compliance testing. If a vehicle is retested, the second test shall be used to determine whether or not it fails the standards.

For purposes of this test procedure (I), a vehicle fails a pollutant if its emissions exceed the applicable model year new vehicle emission standard for that pollutant.

Vehicles shall be tested in groups of four until a "Pass" or "Fail" decision is reached for each pollutant independently for the engine family or subgroup in accordance with the following table:



<u>Number of Vehicles Tested</u>	<u>Decide "Fail" if at least this many vehicles fail the same pollutant</u>	<u>Decide "Pass" if no more than this many vehicles fail the same pollutant</u>
4	3	0
8	4	1
12	5	2
16	6	3
20	7	4
24	8	5

If no decision can be reached after 24 vehicles have been tested, testing shall be discontinued and the Executive Officer may not make a "Fail" decision on the basis of these tests.

If the Executive Officer makes a "Fail" decision in accordance with the above table, the Executive Officer has found that more than 10% of the vehicles within the selected engine family or subgroup exceed the applicable model year new vehicle emission standard for at least one pollutant.

#### Test Procedure II

Vehicles shall be randomly chosen from the selected engine family or subgroup. Each chosen vehicle will be tested once to determine its emissions. All emissions shall be projected to 50,000 miles using the certification deterioration factors for the engine family or subgroup.

Vehicles shall be tested in groups of five until a "Pass" or "Fail" decision is reached for each pollutant independently for the engine family or subgroup in accordance with the following table:

<u>Number of Vehicles Tested</u>	<u>Decide "Fail" if "U" is greater than or equal to</u>	<u>Decide "Pass" if "U" is less than or equal to</u>
5	2.18	-0.13
10	2.11	0.51
15	2.18	0.88
20	2.29	1.16

where:

$$U = \frac{\sum (x_i - \mu_0)}{\sqrt{\sum (x_i - \mu_0)^2}}$$

$x_i$  = the projected emissions of one pollutant for the  $i$ th vehicle tested.

$\mu_0$  = the applicable model year emission standard for that pollutant

n = the number of vehicles tested

If no decision can be reached after 20 vehicles have been tested, testing shall be discontinued and the Executive Officer may not make a "Fail" decision for the selected engine family or subgroup on the basis of these tests.

If the Executive Officer makes a "Fail" decision in accordance with the above table, the Executive Officer has found that the average emissions of the vehicles within the selected engine family or subgroup exceed the applicable model year new vehicle emission standard for a least one pollutant.

State of California

AIR RESOURCES BOARD

Resolution 76-26

June 24, 1976

WHEREAS, Research proposals have been submitted to the Air Resources Board in response to the Board's request for proposals entitled "Emissions Simulator" issued in April 1976 and revised in May 1976,

WHEREAS, the Research Screening Committee has evaluated these proposals as required by the Health and Safety Code, Section 39705;

WHEREAS, the Screening Committee has recommended for funding the following proposal:

ARB Proposal Number 565-40 submitted by Systems Applications, Incorporated, in the amount of \$129,549.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board under the powers and authority granted by the Health and Safety Code, Section 39705 hereby accepts the recommendations of the Research Screening Committee and approves the following proposal:

ARB Proposal Number 565-40 submitted by Systems Applications, Incorporated, in the amount of \$129,549;

and authorizes the Executive Officer to initiate administrative procedures and to execute all necessary documents and contracts for the research effort proposed in an amount not to exceed \$129,549.

State of California

AIR RESOURCES BOARD

Resolution 76-27

June 24, 1976

WHEREAS, research proposals have been submitted to the Air Resources Board in response to the request for proposals entitled "Impact of Industrialization of California Delta Region on Air Quality;"

WHEREAS, the Research Screening Committee has evaluated these proposals as required by the Health and Safety Code, Section 39705;

WHEREAS, The Screening Committee has recommended for funding the following proposal:

ARB Proposal No. 547-40(a) submitted by Meteorological Research Incorporated, California Institute of Technology, and Rockwell Air Monitoring Center for an amount not to exceed \$200,000.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board under the powers and authority granted by the Health and Safety Code, Section 39705 hereby accepts the recommendations of the Research Screening Committee and approves the following proposal:

ARB Proposal No. 547-40(a) submitted by Meteorological Research Incorporated, California Institute of Technology, and Rockwell Air Monitoring Center for an amount not to exceed \$200,000;

and authorizes the Executive Officer to initiate administrative procedures and to execute all necessary documents and contracts for the proposed research project in an amount not to exceed \$200,000.

State of California

AIR RESOURCES BOARD

Resolution 76-28

June 24, 1976

WHEREAS, a research proposal has been submitted to the Air Resources Board in response to the Board's request for proposals entitled "Health Effects Research" issued in April 1976;

WHEREAS, the Research Screening Committee has evaluated the proposals as required by the Health and Safety Code, Section 39705;

WHEREAS, the Research Screening Committee has recommended for funding the following proposal:

ARB Proposal No. 553-40 submitted by the California Department of Health in the amount of \$247,841.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board under the powers and authority granted by the Health and Safety Code, Section 39705 hereby accepts the recommendations of the Research Screening Committee and approves the following proposal:

ARB Proposal No. 553-40 submitted by the California Department of Health in the amount of \$247,841;

and authorizes the Executive Officer to initiate administrative procedures and to execute all necessary documents and contracts for the research effort proposed in an amount not to exceed \$247,841.

State of California  
AIR RESOURCES BOARD

RESOLUTION 76-29  
June 25, 1976

WHEREAS, the Air Resources Board is authorized pursuant to Health and Safety Code Section 39606(a) to divide the state into air basins based upon meteorological, geographic and political boundary considerations for the purpose of coordinating and facilitating efforts to improve air quality in this state;

WHEREAS, the counties of Ventura and Santa Barbara have petitioned that the boundary of the South Coast Air Basin be redesignated to exclude said counties from that basin and relocate them in the South Central Coast Air Basin;

WHEREAS, the Board held a regularly noticed public hearing on this matter on April 17, 1975;

WHEREAS, the board finds that relocation of the counties of Ventura and Santa Barbara into the South Central Coast Air Basin, notwithstanding some meteorological evidence showing transport of pollutants from those counties into the South Coast Air Basin, will facilitate efforts to improve air quality in those counties by providing an opportunity for the development of more stringent and cost effective local emission limitations, enforcement practices, and planning; and

WHEREAS, the Board finds that certain conditions must be placed upon its resolution authorizing the relocation of said counties into the South Central Coast Air Basin to assure the effectiveness of their air pollution control programs;

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby instructs the Executive Officer to prepare and file the appropriate amendments to Title 17, California Administrative Code, to relocate Ventura and Santa Barbara counties into the South Central Coast Air Basin;

BE IT FURTHER RESOLVED, that said relocation is conditioned upon compliance by both Ventura and Santa Barbara counties with the following requirements:

- a) prompt adoption of approvable regulations governing the construction and operation of new or modified stationary sources, substantially as provided by Rules A and B proposed by the Air Resources Board;
- b) active and effective participation in all phases of the Air Quality Maintenance Plan program being conducted by the Air Resources Board;
- c) either operation of coordinated programs, as determined in accordance with the Board's subvention regulations, or the establishment of a unified district (with or without San Luis Obispo County);

d) adoption of regulations assuring that effects of emissions originating in either Ventura or Santa Barbara counties on adjoining air basins are considered in determining the degree of control required;

e) such other requirements as the Executive Officer deems necessary to assure a more stringent and cost effective program.

BE IT FURTHER RESOLVED, that the Executive Officer is authorized, after holding a duly noticed hearing, to revoke the aforesaid boundary change if either county fails to comply with the aforesaid conditions.

State of California  
AIR RESOURCES BOARD

Resolution No. 76-30

July 27, 1976

WHEREAS, Health and Safety Code Section 43200, as amended effective on January 1, 1977 by Chapter 131 of the Statutes of 1976, authorizes the Air Resources Board to require an emissions decal for new motor vehicles as a condition of their sale and registration if such a decal is necessary to enforce or assure compliance with applicable statutes, standards, or procedures relating to vehicle emissions, or for the protection and information of consumers; and

WHEREAS, the Air Resources Board finds that a decal comparing the applicable standards with the results of quarterly average assembly-line inspection tests is necessary for the aforesaid purposes on 1977 and subsequent model-year light-duty trucks and passenger cars; and

WHEREAS, a public hearing and other proceedings have been held in accordance with the provisions of the Administrative Procedure Act (Government Code, Title 2, Division 3, Part 1, Chapter 4.5);

NOW, THEREFORE, BE IT RESOLVED, that the "California Assembly-Line Test Procedures for 1977 Model-Year Gasoline-Powered Passenger Cars and Light-Duty Trucks", dated February 20, 1976, amended July 27, 1976 are hereby adopted.

BE IT FURTHER RESOLVED, that Section 2055 of Article 1, Subchapter 2, Chapter 3, Title 13, California Administrative Code, be amended to read as follows:

2055. Assembly-Line or Pre-Delivery Test Procedure --  
1977 Model-Year Gasoline-Powered Passenger Cars  
and Light-Duty Trucks

New 1977 model-year gasoline-powered passenger cars and light-duty trucks shall be assembly-line tested in compliance with the Air Resources Board's "California Assembly-Line Test Procedures for 1977 Model-Year Gasoline-Powered Passenger Cars and Light-Duty Trucks", adopted February 20, 1976, amended July 27, 1976.



State of California  
AIR RESOURCES BOARD

Resolution 76-31

July 27, 1976

WHEREAS, Section 43834 of the Health and Safety Code requires the Air Resources Board to establish standards or criteria for certification of motor vehicle auxiliary gasoline fuel tank evaporative loss control devices or systems;

WHEREAS, Section 39068.7 of the Health and Safety Code requires the Air Resources Board to adopt specifications for motor vehicle fuel tanks to assure compatability with vapor control systems;

WHEREAS, the Air Resources Board has adopted regulations to ensure compatibility of 1977 and later model year motor vehicle fuel tank filler necks and gasoline vapor recovery systems which should be extended to cover auxiliary gasoline tanks.

AND WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of the Administrative Procedure Act (Government Code, Title 2, Division 3, Part 1, Chapter 4.5);

NOW, THEREFORE, BE IT RESOLVED, that the "California Criteria and Test Procedures for Accrediting Auxiliary Gasoline Fuel Tanks", dated December 19, 1973, amended March 17, 1975, and July 27, 1976, are hereby adopted;

BE IT FURTHER RESOLVED, that the Board hereby amends Chapter 3, Subchapter 1, Article 3, Section 2009, of Title 13, California Administrative Code to read as follows:

2009.      Auxiliary Gasoline Fuel Tank Criteria and Test Procedures

In order for an auxiliary gasoline fuel tank to be certified by the Board, the fuel evaporative emission control system for the auxiliary tank fuel system shall provide substantially the same degree of control as the originally approved or certified evaporative emission control system provides for the original fuel system, and the fill pipe and opening shall be compatible with vapor control systems.

The test procedures for determining compliance with this standard are set forth in "California Criteria and Test Procedures for Certification of Auxiliary Gasoline Fuel Tanks" dated December 19, 1973, amended March 17, 1975, and July 27, 1976.

State of California

AIR RESOURCES BOARD

Resolution 76-32

July 26, 1976

WHEREAS, the Air Resources Board has received a research proposal submitted in response to the Board's request for proposals entitled "Heavy-Duty Vehicle Emission Inventory" issued in April 1976;

WHEREAS, the Research Screening Committee has carefully reviewed and evaluated the proposal; and

WHEREAS, the Research Screening Committee has recommended for funding the proposal:

ARB Proposal Number 548-40 submitted by TRW, Inc. entitled "Heavy-Duty Vehicle Emission Inventory" in the amount of \$245,894;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board hereby approves the proposal:

ARB Proposal Number 548-40 submitted by TRW, Inc. entitled "Heavy-Duty Vehicle Emission Inventory" in the amount of \$245,894,

and authorizes the Executive Officer to initiate administrative procedures and to execute all necessary documents and contracts for the research effort proposed in an amount not to exceed \$245,894.

State of California

AIR RESOURCES BOARD

July 26, 1976

Resolution 76-33

WHEREAS, the Air Resources Board, by direction of the Governor in Executive Order No. B-6-75 and pursuant to Administrative Order No. 75-2, issued jointly by the Air Resources Board and the Office of Emergency Services, has adopted the California Air Pollution Emergency Plan;

WHEREAS, the Air Resources Board is the state agency charged with the responsibility to prepare, direct and execute the Air Pollution Emergency Plan;

WHEREAS, on May 28, 1976, the Board amended the Air Pollution Emergency Plan to establish additional criteria for sulfate-oxidant, and for sulfur dioxide-oxidant episodes but postponed the establishment of abatement actions for the aforesaid episodes until after the receipt of more data and information from the public and the affected industries;

WHEREAS, the Board and its staff have conducted two workshops to obtain data and information on abatement actions for the aforesaid episodes;

WHEREAS, the Board has identified abatement actions for the aforesaid episodes which are necessary and reasonably feasible;

WHEREAS, the Air Resources Board has complied with all public hearing and notice requirements of state and federal law;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board does hereby amend the Air Pollution Emergency Plan, as revised July 26, 1976.

State of California

AIR RESOURCES BOARD

Resolution 76-35

August 10, 1976

WHEREAS, Health and Safety Code Section 41500 requires the Board to review the rules and regulations and enforcement practices of the districts to determine whether reasonable action is being taken to achieve and maintain the state ambient air quality standards;

WHEREAS, Health and Safety Code Section 41504 provides that if, after a public hearing, the State Board finds that the rules and regulations of a district will not likely achieve and maintain the adopted ambient air quality standards, the State Board may establish such rules and regulations as it deems necessary to enable the district to achieve and maintain such ambient air quality standards;

WHEREAS, the Board finds that the rules and regulations of the Bay Area Air Pollution Control District do not contain a requirement for the Air Pollution Control Officer to deny permission to construct a new stationary source or modification of an existing stationary source if the new source or modification would interfere with the attainment or maintenance of an ambient air quality standard in an air basin other than the San Francisco Bay Area Air Basin, and that, accordingly, the District's rules and regulations will not likely achieve and maintain the State ambient air quality standards in other air basins;

WHEREAS, the Board has held a public hearing in accordance with Health and Safety Code Section 41502;

NOW, THEREFORE BE IT RESOLVED, that the Air Resources Board hereby effective immediately amends § 1309 of Regulation 2 of the Bay Area Air Pollution Control District to read in its entirety as set forth in Exhibit A attached hereto.

BE IT FURTHER RESOLVED, that the Board hereby delegates to the Executive Officer the authority to review any amendment to § 1309 by the Bay Area Air Pollution Control District which is designed to provide for consideration of the impact of pollutants originating in the Bay Area Pollution Control District on air quality in other air basins and, if he finds such amendment adequate, to rescind the amendment made hereby.

State of California

AIR RESOURCES BOARD

Bay Area Air Pollution Control District

Regulation 2

§ 1309 Denial - Interference with the Attainment or Maintenance of Air Quality Standards. The Air Pollution Control Officer, after considering all available information about existing air quality, information about the emission of air contaminants from existing source operations, information about the emission of air contaminants from the proposed new source operations, and information on the projected levels of air quality, shall deny an authority to construct, erect, alter, or replace any facility, building, article, machine, equipment or other contrivance, the use of which may cause the emission or creation of a significant quantity of any air contaminant which would interfere with the attainment or maintenance of any air quality standard adopted by the California Air Resources Board or the Environmental Protection Agency in any area of the district, *in any air basin that is contiguous with the Bay Area Air Pollution Control District, or in any air basin that is not contiguous with the Bay Area Air Pollution Control District but that is found by the Air Pollution Control Officer to be a receptor air basin because of meteorological considerations.*

NOTE: New language is shown in italics.

State of California  
AIR RESOURCES BOARD

Resolution 76-36

October 4, 1976

WHEREAS, § 39601 authorizes the Air Resources Board to adopt standards, rules, and regulations necessary for the proper execution of the powers and duties granted to, and imposed upon, the Board by law;

WHEREAS, § 87300 of the Government Code requires the Board to adopt and promulgate a Conflict of Interest Code pursuant to the provisions of Article 3 of Chapter 7 of the Political Reform Act of 1974;

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of the Administrative Procedure Act (Government Code, Title 2, Division 3, Part 1, Chapter 4.5);

NOW, THEREFORE BE IT RESOLVED, that the "Air Resources Board Conflict of Interest Code", dated May 27, 1976, as amended October 4, 1976, is hereby adopted.

BE IT FURTHER RESOLVED, that the Board hereby amends Subchapter 9 in Part III, Chapter 1 of Title 17, California Administrative Code to read in conformance herewith.

After proceedings had in accordance with the provisions of the Administrative Procedure Act (Government Code, Title 2, Division 3, Part 1, Chapter 4.5) and pursuant to the authority vested by Section 39601 of the Health and Safety Code, and to implement, interpret and make specific Section 87300 of the Government Code, the Air Resources Board hereby amends its regulations in Title 17, California Administrative Code, as follows:

Adopt new Subchapter 9 to read:

Article 1. General Provisions

§ 95000. Authority. The Air Resources Board (the "Board"), pursuant to the Political Reform Act of 1974 (Government Code Sections 87100 et seq.) and Health and Safety Code Section 39601, hereby adopts this Conflict of Interest Code.

§ 95001. Purpose. The purpose of this Code is to specify categories of employees required to disclose economic interests, the nature of the interests that must be disclosed, and the circumstances in which employees will be disqualified from making or participating in any decision because of a conflict of interest.

§ 95002. Definitions. The definitions contained in the Political Reform Act of 1974 (Government Code Section 81000, et seq.) and the regulations adopted pursuant thereto are hereby incorporated into this Conflict of Interest Code by reference.

Article 2. Disclosure Categories

§ 95010. "Designated Employees". Persons holding the position listed in the sections below on either a permanent or acting basis are those whose job-related activities involve a significant degree of discretionary and independent authority to affect private financial interests, and are therefore "designated employees" for the purposes of this Conflict of Interest Code.

§ 95011. Professional Employees. Professional employees are persons whose employment classification requires a college degree or the equivalent thereof as a minimum qualification at the entry level of State service.

§ 95012. Category I. (a) Air Resources Board Members, Executive Officer, Deputy Executive Officers, Assistant Executive Officer, Chief Legislative Liaison, Assistant



Legislative Liaison, Chief Public Information Officer, all Division Chiefs and Assistant Division Chiefs, and all staff Attorneys, and all staff of the Program Evaluation Office.

(b) Every person in this Category must report: all investments, all interests in real property, all sources of income, and his or her status as a director, officer, partner, trustee, employee, or holder of any position of management in any California business entity.

§ 95013. Category II. (a) All professional employees in and special consultants attached to the Energy and Industrial Projects Evaluation and Control Strategy Development Branches of the Stationary Source Control Division and the Planning Division.

(b) Every person in this Category must report: all investments in, income from, and his or her status as a director, officer, partner, trustee, employee, or holder of any position of management, (i) in any California business entity which is subject to or which foreseeably may be subject to any laws of the State of California, or regulations promulgated by the Air Resources Board, relating to the control of air pollution from nonvehicular sources, or subject to any rules or regulations promulgated by any local air pollution control district; (ii) in any California

business entity which has contracted, or in the future foreseeably may contract with the Board to provide services, supplies, materials, machinery, instrumentation, or equipment to the Board; (iii) in any business entity which is regularly engaged in the development of or investment in real property in California; and (iv) in any business entity which is regularly engaged in the preparation of environmental impact reports or environmental impact statements.

§ 95014. Category III. (a) All professional employees in and special consultants attached to the Research, Modelling and Air Quality Standards Sections of the Research Division, and all members of the Research Screening Committee.

(b) Every person in this Category must report: all investments in, income from, and his or her status as a director, officer, partner, trustee, employee, or holder of any position of management, (i) in any California business entity which is subject to or which foreseeably may be subject to any laws of the State of California relating to the control of air pollution from vehicular or nonvehicular sources, or which is subject to any rules or regulations promulgated either by the Air Resources Board or by any local air pollution control district; and (ii) in any business entity or non-profit institution involved in activities

relating to air pollution research, the development of air pollution control strategies or any activity which for the past two years has been, or foreseeably will be the subject of a Board research proposal, bid or contract.

§ 95015. Category IV. (a) All professional employees in and special consultants attached to: the Enforcement Branch of the Legal Affairs and Enforcement Division, the Engineering Evaluation and Subvention Sections of the Stationary Source Control Division, and the Technical Services Division (except the Electronic Data Processing Management Section thereof), and all Public Information Officers.

(b) Every person in this Category must report: all investments in, income from, and his or her status as a director, officer, partner, trustee, employee, or holder of any position of management, in any California business entity which is subject to or which foreseeably may be subject to any laws of the State of California relating to the control of air pollution from vehicular or nonvehicular sources, or which is subject to any rules or regulations promulgated either by the Air Resources Board or by any local air pollution control district.

§ 95016. Category V. (a) All professional personnel in and special consultants attached to the Vehicle Emissions Control Division.

(b) Every person in this Category must report: all investments in, income from, and his or her status as a director, officer, partner, trustee, employee, or holder of any position of management, (i) in any California business entity associated with the manufacture, distribution, sale, repair, or advertisement of motor vehicles, vehicular emission control devices or equipment, or vehicle aftermarket parts or vehicle fuels or fuel additives which may affect emissions; and (ii) in any California business entity which has contracted, or in the future foreseeably may contract with the Board to provide services, supplies, materials, machinery, instrumentation, or equipment to the Board.

§ 95017. Category VI. (a) All personnel in and special consultants attached to the Atmospheric Studies Branch of the Research Division.

(b) Every person in this Category must report: all investments in, income from, and his or her status as a director, officer, partner, trustee, employee, or holder of any position of management, in any California business entity which has contracted, or in the future foreseeably may contract with the Board to provide services, supplies, materials, machinery, instrumentation, or equipment to the Board.

§ 95018. Consolidated Administrative Services. The designated employees in Consolidated Administrative Services are not subject to the provisions of this Code, but are subject to the Conflict of Interest Code promulgated by the State Water Resources Control Board. See Title 23, California Administrative Code, Section \_\_\_\_ et seq.

§ 95019. Advisory Committees. The Board finds all members of advisory groups or committees appointed by the Board pursuant to Health and Safety Code Section 39603, and all members of the Sandblasting Committee appointed by the Board pursuant to Health and Safety Code Section 41900, not to be "public officials" within the meaning of Title 2, California Administrative Code, Section 18700, or "designated employees" within the meaning of this Code, and therefore exempt from the disclosure requirements of this Code.

Article 3. Disclosure of Economic Interests

§ 95020. Disclosure Statements. Every designated employee shall complete and file the annual Air Resources Board Economic Interest Disclosure Statement in accordance with his or her disclosure category. The Air Resources Board Economic Interest Disclosure Statement, which is

attached hereto as Appendix A and is incorporated herein by reference, contains a complete description of the interests required to be disclosed.

§ 95021. Time of Filing. (a) Each designated employee of the Board shall file a report within 30 days after the date this Conflict of Interest Code is approved by the Fair Political Practices Commission (the "Approval Date").

(b) Civil service designated employees appointed after the Approval Date shall file reports within 30 days after assuming office.

(c) All employees appointed after the Approval Date who are exempt from civil service shall file reports not less than ten days before assuming office, or if subject to confirmation, ten days before being confirmed, whichever occurs first, unless an earlier assumption of office is required by emergency circumstances.

(d) When an employee moves from any position to a position in a different disclosure category under Article 2 of this subchapter the employee shall file a disclosure report appropriate to the new position within 30 days after assuming the new position.

(e) After filing a report pursuant to subsection (a), (b), (c) or (d), each designated employee of the Board shall

file an annual report on May 1 of each year for the duration of service as a designated employee, and within 30 days after leaving office as a designated employee.

§ 95022. Place of Filing. All disclosure reports shall be filed with the Chief, Consolidated Administrative Services, who shall make one copy for the Board's records and file the original with the Fair Political Practices Commission. The Chief, Consolidated Administrative Services, shall maintain each copy in an indexed binder, available for public inspection and copying at the office of the Air Resources Board.

#### Article 4. Disqualification

§ 95030. Disqualification. A designated employee shall disqualify himself or herself from making, or participating in the making of a governmental decision when the employee has a financial interest subject to disclosure under this Code which foreseeably may be materially affected by the decision. Disqualification shall not be required if the effect of the decision on the designated employee's financial interest is not distinguishable from its effect on the public generally.

§ 95031. Manner of Disqualification. (a) In the event a designated employee is assigned to work on a matter in which the employee has a financial interest, and the assignment involves the making or participation in the making of a governmental decision which foreseeably may materially affect that interest, the employee shall prepare a disqualification statement describing the interest and its relation to the proposed action. The employee shall give the statement to his or her immediate supervisor. The supervisor shall acknowledge receipt of the statement in writing and return one copy of the statement to the employee, shall immediately reassign the case to another employee, and shall forward one copy each to the Chief, Consolidated Administrative Services, and to the Chief Counsel.

(b) If a designated employee is in doubt as to whether he or she must disqualify himself or herself from taking any action, the employee shall request a determination from the Chief Counsel as to whether disqualification is required. Within 48 hours after receipt of such a request, the Chief Counsel shall inform the employee as to whether disqualification is required. Within 7 days after receipt of the request, the Chief Counsel shall, by written memorandum to the employee, state the reasons for his or her determination. One copy of this memorandum shall be sent to the Chief, Consolidated Administrative Services.



(c) A designated employee who has complied in good faith with all provisions of this Code, and who acts or refrains from taking action on the advice of the Chief Counsel, shall not be the subject of any disciplinary action by the Board in connection with the transaction regarding which advice was sought.

(d) Where a claim or action has been filed under the Political Reform Act of 1974 against a designated employee and said employee has complied in good faith with all provisions of this Code and has been acting within the scope of his or her employment, the Board shall undertake the employee's defense under the provisions of Part 7 (commencing at Section 995) of the Government Code. The Board's liability for any subsequent judgment or any payment pursuant to any compromise or settlement on such claim or action shall be governed by the provisions of Government Code Section 825.

§ 95032. Rule of Necessity. No designated employee shall be required to disqualify himself or herself with respect to any matter which could not be legally acted upon or decided without his or her participation.

§ 95033. Legally Required Participation. (a) A designated employee is not legally required to make or to participate in the making of a governmental decision unless there exists

no alternative source of making the decision consistent with the purposes and terms of the statute authorizing the decision.

(b) Whenever a designated employee who has a financial interest in a decision is legally required to make or to participate in making such a decision, he or she shall:

- (1) Disclose as a matter of official public record the existence of the financial interest;
- (2) Describe with particularity the nature of the financial interest before he or she makes or participates in making the decision;
- (3) Attempt in no way to use his or her official position to influence any other public official with respect to the matter;
- (4) State the reason there is no alternative source of decision-making authority;
- (5) Participate in making the decision only to the extent that such participation is legally required;
- (6) This section shall be construed narrowly, and shall not be construed to permit voting to break a tie.

#### Article 5. Sanctions

§ 95040. Sanctions. This Code shall have the force of law. Violations of any provision of this Code may subject an employee, officer or contract consultant of the Air Resources

APPENDIX A

State of California  
AIR RESOURCES BOARD  
ECONOMIC INTEREST DISCLOSURE STATEMENT

1. Name (print): \_\_\_\_\_
2. Address: \_\_\_\_\_
3. Position: \_\_\_\_\_
4. Disclosure Category: \_\_\_\_\_
5. Check the appropriate statement:

\_\_\_\_\_ I HOLD the above-named position. (File within 30 days after the Conflict of Interest Code of the Air Resources Board is approved by the Fair Political Practices Commission, and thereafter by May 1 of each year.)

\_\_\_\_\_ I have been APPOINTED to the above-named civil service position. (File within 30 days after assuming the position.)

\_\_\_\_\_ I have been APPOINTED to the above-named exempt position. (File at least 10 days before taking office or at least 10 days before your appointment is confirmed.)

\_\_\_\_\_ I am leaving the above-named position. (File within 30 days after leaving the position.)

6. This statement covers the period from \_\_\_\_\_, 19\_\_ through \_\_\_\_\_, 19\_\_.

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VERIFICATION

I declare under penalty of perjury that this Economic Interest Disclosure Statement is complete, true and correct to the best of my knowledge and belief.

Executed on \_\_\_\_\_, 19\_\_, at \_\_\_\_\_, California.

\_\_\_\_\_  
(Signature)

Date Received and Initials:

1. C.A.S. \_\_\_\_\_
2. FPPC \_\_\_\_\_

Definitions.

"California business entity" is any entity which operates for profit if the entity or any parent, subsidiary or otherwise related business entity owns real property in California or does business, plans to do business, or has done business in California within two years of the date of this statement.

"Indirect interest" is any interest owned or held by your spouse or dependent children, by an agent on your behalf, by any business entity controlled by you, or by a trust in which you have a substantial interest. A business entity is "controlled" by you if you, your agents, spouse or dependent children hold more than fifty percent of the ownership interest in the entity. You have a "substantial" interest in a trust when you, your spouse or dependent children have any present or future interest worth more than one thousand dollars (\$1,000).

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You must complete all seven schedules. If you have no items to report on one or more schedules, write "none" on the top line of the schedule.

SCHEDULE A

Investments Over \$1,000

Disclosure Category I: You must report each of your investments valued at more than \$1,000 in any California business entity.

Disclosure Category II: You must report each of your investments valued at more than \$1,000 (i) in any California business entity which is subject to or which foreseeably may be subject to any laws of the State of California or regulations promulgated by the Air Resources Board, relating to the control of air pollution from nonvehicular sources, or subject to any rules or regulations promulgated by any local air pollution control district; (ii) in any California business entity which has contracted, or in the future foreseeably may contract with the Board to provide services, supplies, materials, machinery, instrumentation, or equipment to the Board; (iii) in any business entity which is regularly engaged in the development of or investment in real property in California; and (iv) in any business entity which is regularly engaged in the preparation of environmental impact reports or environmental impact statements.

Disclosure Category III: You must report each of your investments valued at more than \$1,000 (i) in any California business entity which is subject to or which foreseeably may be subject to any laws of the State of California relating to the control of air pollution from vehicular or nonvehicular sources, or which is subject to any rules or regulations promulgated either by the Air Resources Board or by any local air pollution control district; and (ii) in any California business entity involved in activities relating to air pollution research, the development of air pollution control strategies or any activity which for the past 2 years has been, or foreseeably will be the subject of a Board research proposal, bid or contract.

Disclosure Category IV: You must report each of your investments valued at more than \$1,000 (i) in any California business entity which is subject to or which foreseeably may be subject to any laws of the State of California relating to the control of air pollution from vehicular or nonvehicular sources, or which is subject to any rules or regulations promulgated either by the Air Resources Board or by any local air pollution control district.

Disclosure Category V: You must report each of your investments valued at more than \$1,000 (i) in any California business entity associated with the manufacture, distribution, sale,

repair or advertisement of motor vehicles, vehicular emission control devices or equipment, or vehicle aftermarket parts or vehicle fuels or fuel additives which may affect emissions; and (ii) in any California business entity which has contracted, or in the future foreseeably may contract with the Board to provide services, supplies, materials, machinery, instrumentation, or equipment to the Board.

Disclosure Category VI: You must report each of your investments valued at more than \$1,000 in any California business entity which has contracted, or in the future foreseeably may contract with the Board to provide services, supplies, materials, machinery, instrumentation, or equipment to the Board.

An "investment" is any direct or indirect interest in or security issued by a business entity, including but not limited to common stock, preferred stock, rights, warrants, options, debt instruments and any partnership or other ownership interest.

You must also indicate whether the value of your reportable investment exceeds \$10,000 or \$100,000. You should consider the highest fair market value of the asset during the period covered. You should indicate the date you acquired or disposed of the investment only if acquisition or disposal occurred during the reporting period.

EXCEPTIONS: DO NOT report the following as investments:

- Any investment of less than \$1,000 value.
- Time or demand deposits in financial institutions (e.g., bank accounts, savings accounts).
- Shares in a credit union.
- Insurance policies.
- Bonds and other debt instruments issued by any government agency.

		<u>Check One</u>
----- (Name of Company)		<input type="checkbox"/> Value exceeds \$1,000 but does not exceed \$10,000.
----- (General Description of Business Activity)		<input type="checkbox"/> Value exceeds \$10,000 but does not exceed \$100,000.
----- (Nature of your Interest, e.g., Common Stock, Partnership, etc.)		<input type="checkbox"/> Value exceeds \$100,000.
Date Acquired _____	Date Disposed of _____	

.....repeat box .....



SCHEDULE B

Interests in Real Property Over \$1,000

Disclosure Categories I and II: You must report each direct or indirect interest in real property located in California, other than your principal residence, if the fair market value of your interest is more than \$1,000. An interest in real property is any leasehold, beneficial or ownership interest, or an option to acquire such an interest in real property.

If you have a loan on your real property, you should consider only your equity interest. For example, if you own property with a fair market value of \$25,000 in which you have an \$8,000 equity (with \$17,000 still owed to the mortgagee), your reportable interest is \$8,000. You should indicate the date you acquired or disposed of the real property only if acquisition or disposal occurred during the reporting period.

		<u>Check One</u>
<hr/> <div>(Street address or precise location, of property. If no street address, use book and page number at which deed is recorded, obtainable from County Recorder's Office.)</div>		<input type="checkbox"/> Value exceeds \$1,000 but does not exceed \$10,000.
<hr/> <div>(Nature of interest, e.g., equity, option).</div>		<input type="checkbox"/> Value exceeds \$10,000 but does not exceed \$100,000.
<div>Date Acquired _____</div>	<div>Date Disposed of _____</div>	<input type="checkbox"/> Value exceeds \$100,000

..... repeat box .....

SCHEDULE C

Investments and Interest in Real Property

Held by California Business Entities you Control

If you hold a direct or indirect interest of 50 percent or more in a California business entity listed in Schedule A, you must report all investments over \$1,000 of that entity in California business entities, and all interests in real property worth over \$1,000 held by that entity in California. A separate Schedule C must be completed for each business entity.

\_\_\_\_\_  
(Name of Entity you Control)

C(1) Investments held by business entity you control.

<u>Check One</u>	
(Name of Investment)	<input type="checkbox"/> Value exceeds \$1,000 but does not exceed \$10,000.
(General Description of Business Activity)	<input type="checkbox"/> Value exceeds \$10,000 but does not exceed \$100,000.
(Nature of Interest, e.g., Common Stock, etc.)	<input type="checkbox"/> Value exceeds \$100,000.
Date Acquired _____	Date Disposed of _____

.....repeat box.....

C(2) Interests in real property held by business entity  
you control.

<p>(Street address or precise location of property. If no street address, use book and page number at which deed is recorded, obtainable from County Recorder's Office)</p> <p>(Nature of interest, e.g., equity, option).</p> <p>Date Acquired _____ Date Disposed of _____</p>		<p><u>Check One</u></p> <p>( ) Value exceeds \$1,000 but does not exceed \$10,000.</p> <p>( ) Value exceeds \$10,000 but does not exceed \$100,000.</p> <p>( ) Value exceeds \$100,000.</p>

.....repeat box.....

SCHEDULE D

Management Positions

Disclosure Category I: You must list any California business entity in which you are now a director, officer, partner, trustee, employee or manager.

Disclosure Categories II, III, IV, V and VI: You must list any California business entity listed in accordance with the requirements of your Disclosure Category in which you are now a director, officer, partner, trustee, employee or manager.

EXCEPTIONS: DO NOT report the following as entities in which you have a management position:

- Any organization or enterprise which is not operated for profit.
- Any entity in which your position is solely advisory.
- Any entity from which you receive neither income nor compensation for expenses.

Name of Entity

Your Position

_____	_____
_____	_____
_____	_____
_____	_____

## SCHEDULE E

### California Income Aggregating \$250 or More

Disclosure Category I: You must disclose California income of any nature aggregating \$250 or more which you received from any one source during the reporting period.

Disclosure Categories II, IV, V and VI: You must disclose California income aggregating \$250 or more which you received during the reporting period from any business entity which is listed in accordance with the requirements of your disclosure category.

Disclosure Category III: You must disclose California income aggregating \$250 or more which you received during the reporting period from any business entity or non-profit institution which is listed in accordance with the requirements of your disclosure category.

EXCEPTIONS: DO NOT report the following as income:

- Income from a former employer, if all income from the employer was received by you prior to the time you became a designated employee, such income was received in the normal course of your employment, and you have no expectation of renewed employment with the former employer.
- Salary or reimbursements for expenses and per diem received from a state or local government agency.

- Gifts. These are reportable on Schedule F.
- Loans by a commercial lending institution in the regular course of business.
- Reimbursement for travel expenses and per diem received from a bona fide educational, academic or charitable organization.
- Any devise or inheritance.
- Dividends, interest or other return on a security which is registered with the Securities and Exchange Commission of the U.S. Government.
- Interest, dividends or premiums on a time or demand deposit in a financial institution, shares in a credit union or insurance policy, payments received under an insurance policy, bond or other debt instrument issued by a government or government agency.

	<u>Check One</u>
----- (Name of the Source of Income)	( ) Amount or value received was greater than \$250 but was not greater than \$1,000.
----- (Address of the Source of Income)	( ) Amount or value received was greater than \$1,000 but was not greater than \$10,000.
----- (Business Activity of the Source of the Income)	( ) Amount or value received was greater than \$10,000.
----- (Description of the Consideration, if any, for the income, e.g., employment) -----	

.....repeat box.....

## SCHEDULE F

### Gifts Aggregating \$25 or More

Disclosure Category I: You must report gifts from a California source totaling \$25 or more during the reporting period.

Disclosure Categories II and III: You must report gifts totaling \$25 or more which you received during the reporting period from any business entity which is listed in accordance with the requirements of your disclosure category.

EXCEPTIONS: DO NOT report the following as gifts:

- Any gift of hospitality, food, or drink which you have reciprocated during the reporting period.
- Gifts of informational material, such as books, pamphlets, reports, calendars or periodicals.
- Gifts from your spouse, child, parent, grandparent, grandchild, brother, sister, parent-in-law, sibling-in-law, aunt, uncle or first cousin, or the spouse of any such person, unless that person is acting as an agent or intermediary for any person or entity which is not covered by these exceptions.
- Any gift which you have not used and have returned within 30 days.
- Any gift which you have given to a charitable organization without claiming it as a charitable contribution for tax purposes.

Investments held by business entity.

	<u>Check One</u>
----- (Name of Investment)	( ) Your pro rata share exceeds \$1,000 but does not exceed \$10,000.
----- (General Description of Business Activity)	( ) Your pro rata share exceeds \$10,000 but does not exceed \$100,000.
----- (Nature of Interest, e.g., Common Stock, etc.)	( ) Your pro rata share exceeds \$100,000.
<div style="display: flex; justify-content: space-between;"> <div>Date Acquired _____</div> <div>Date Disposed of _____</div> </div>	

Interests in real property held by business entity.

	<u>Check One</u>
----- (Street address or precise location of property. If no street address, use book and page number at which deed is recorded, obtainable from County Recorder's Office)  ----- (Nature of interest, e.g., equity, option).  -----	( ) Your pro rata share exceeds \$1,000 but does not exceed \$10,000.  ( ) Your pro rata share exceeds \$10,000 but does not exceed \$100,000.  ( ) Your pro rata share exceeds \$100,000.
<div style="display: flex; justify-content: space-between;"> <div>Date Acquired _____</div> <div>Date Disposed of _____</div> </div>	

-- Repeat boxes as necessary --



If you checked box (b) above, list the name of each California business entity or individual who paid fees during the calendar year to the above business entity, if your pro rata share of the fees was \$10,000 or more.


You must also list all investments of the above business entity in other California business entities, and all interests in real property held by the above business entity in California, if your pro rata share of such investments or interests is worth more than \$1,000.

Oct. 4, 1976 - Monday  
10:00 a.m.  
Sheraton Inn Hotel  
Fresno

State of California  
AIR RESOURCES BOARD

Notice of Public Hearing For Consideration  
of Revisions to ARB Conflict of Interest Code

Notice is hereby given that the Air Resources Board, pursuant to the authority vested by Section 39601 of the Health and Safety Code, and to implement, interpret, or make specific Section 87300 of the Government Code, proposes to revise the Conflict of Interest Code which it adopted at its meeting of May 27, 1976.

The Political Reform Act of 1974 requires that all state agencies, including the Air Resources Board, adopt a Conflict of Interest Code. The purpose of this Code is to assure that all foreseeable conflicts of interest of public officials will be disclosed and prevented, and to provide specific guidelines to public officials and employees of their obligation to avoid conflicts of interest and to disclose appropriate financial interests.

Any person who holds a position which entails the making or participation in the making of a governmental decision which may foreseeably have a material effect on any financial interests which may be held by that person shall be a "designated employee" under this Code. The Conflict of Interest Code requires that each designated employee file an annual statement disclosing reportable financial interests.

Pursuant to the authority vested by Section 83112 of the Government Code, the Fair Political Practices Commission may adopt, amend, and rescind rules and regulations to carry out the purposes and provisions of the Political Reform Act of 1974. In accordance with this authority, the Fair Political Practices Commission, at its meeting of August 5, 1976, revised its regulations in Title 2, California Administrative Code, by modifying its definition of the term "participates in the making of a governmental decision", as this term relates to the conflict of interest provisions of the Political Reform Act of 1974. The effect of this revision is to restrict the class of public officials who shall be "designated employees" under a Conflict of Interest Code to those employees whose participation in governmental decision-making processes entails negotiation with outside parties, the giving of advice or the making of recommendations to the decision maker either directly or without significant intervening substantive review.

Accordingly, the Air Resources Board proposes to revise its Conflict of Interest Code, as follows:

1. The disclosure categories contained in Article 2 of the Conflict of Interest Code will be modified so that only those Air Resources Board employees whose participation in the decision-making processes of the Board involves no significant substantive intervening review will be classified as "designated employees".

2. The number of disclosure categories contained in Article 2 of the Code will be expanded in order to adequately differentiate between Air Resources Board designated employees with different powers and responsibilities.
3. A number of minor revisions of a nonsubstantive nature will be made in order to clarify the phraseology of certain provisions of the Code.

Copies of the proposed revisions to the Code may be obtained from the Air Resources Board at P. O. Box 2815, Sacramento, CA 95812, Attention: Staff Counsel.

The Air Resources Board has determined that the proposed action will create no cost to local government pursuant to Section 2231 of the Revenue and Taxation Code.

Notice is also given that any interested person, including any Air Resources Board employee or official, may present statements or arguments orally or in writing relevant to the action proposed at a public hearing to be held by the Air Resources Board beginning at 10:00 a.m. on October 4, 1976, at the Sheraton Inn Hotel, 2550 West Clinton Avenue, Las Vegas Room #2, Fresno, California.

The Air Resources Board, upon its own motion or at the instance of any interested person, may thereafter adopt the above revisions substantially as set forth without further notice.

STATE AIR RESOURCES BOARD



James D. Boyd  
Deputy Executive Officer

September 2, 1976

State of California  
AIR RESOURCES BOARD

Resolution 76-37

October 5, 1976

WHEREAS, Section 39601 of the Health and Safety Code authorizes the Air Resources Board to adopt standards, rules, and regulations necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law;

WHEREAS, Sections 43101 and 43104 of the Health and Safety Code authorize the Board to adopt vehicle emission standards in order to control or eliminate air pollution caused by motor vehicles;

WHEREAS, at the August 25-26, 1976 waiver hearing conducted by the United States Environmental Protection Agency (EPA), the EPA and vehicle manufacturers indicated that the March 31, 1976 California fuel evaporative emission test procedures should be expanded in certain areas.

WHEREAS, the EPA has adopted an evaporative emission standard and test procedures which are similar to the California procedure except for system durability testing;

WHEREAS, adoption of the EPA procedures, with clarification of the issues raised at the waiver hearing, would assist California in obtaining a waiver to enforce heavy-duty vehicle evaporative emission requirements; and

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of the Administrative Procedure Act (Government Code, Title 2, Division 3, Part 1, Chapter 4.5);

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby amends Chapter 3, Subchapter 1, Article 2, Section 1976, of Title 13, California Administrative Code to read as follows:

1976. Standards and Test Procedures for Evaporative Emissions from Gasoline-Powered Vehicles.

- a) Fuel evaporative emissions from 1970 through 1977 model passenger cars and light-duty trucks are set forth in 40 Code of Federal Regulation, Part 85, Subparts A and C. These standards are enforced in California pursuant to Section 43008 of the Health and Safety Code.
- b) Evaporative emissions from new 1978 and subsequent model gasoline-powered motor vehicles except motorcycles shall not exceed 6.0 grams of hydrocarbons per test.

The procedure for determining compliance with this standard is set forth in "California Evaporative Emission Standard and Test Procedures for 1978 and Subsequent Model Gasoline-Powered Motor Vehicles Except Motorcycles," adopted by the Air Resources Board on April 16, 1975, and amended on March 31, 1976 and October 5, 1976.

BE IT FURTHER RESOLVED, that the "California Evaporative Emission Standard and Test Procedures for 1978 and Subsequent Model Gasoline-Powered Motor Vehicles Except Motorcycles," as last amended on October 5, 1976, is adopted.

CALIFORNIA EVAPORATIVE EMISSION  
STANDARD AND TEST PROCEDURES  
FOR 1978 AND SUBSEQUENT MODEL  
GASOLINE-POWERED MOTOR VEHICLES  
EXCEPT MOTORCYCLES

The provisions of Title 40, Code of Federal Regulation, Part 86, Subparts A and B, as they pertain to evaporative emission standard and test procedures and as they existed on September 22, 1976, are hereby adopted as the California Evaporative Emission Standard and Test Procedures for 1978 and Subsequent Model Gasoline-Powered Motor Vehicles Except Motorcycles, with the following exceptions and additions:

1. This standard and these test procedures are applicable to all new 1978 and subsequent model gasoline-powered passenger cars, light-duty trucks, medium-duty vehicles and heavy-duty vehicles with engine displacements of greater than 50 cubic inches and which are subject to registration and first sold and registered in this state.
2. The definitions in Section 1900, Title 13, California Administrative Code, and in the applicable model year California exhaust emission standards and test procedures, are hereby incorporated into this test procedure by reference.
3. Approval of medium-duty vehicles shall be based on the same standard and test procedures as light-duty trucks. In selecting medium-duty test vehicles the Executive Officer shall consider the availability of test data from comparably equipped light-duty vehicles and the size of medium-duty vehicles as it relates to the practicability of evaporative emission testing.
4. Demonstration of system durability and determination of an evaporative emission deterioration factor for each evaporative emission engine family shall be based on tests of representative vehicles and/or systems. For purposes of evaporative emission testing a representative vehicle is one which, with the possible exception of the engine and drivetrain, was built at least three months prior to the commencement of evaporative emission testing, or is one which the manufacturer demonstrates has stabilized non-fuel-related evaporative emissions.
  - a. For 1978 model evaporative emission engine families which require durability testing for exhaust emissions certification, either
    - i. Evaporative emission testing shall be conducted on all durability vehicles at the 5,000, 10,000, 20,000, 30,000, 40,000, and 50,000 mile test points. Testing may be performed at more frequent intervals with advance written approval from the

Executive Officer. The results of all valid evaporative emission tests within each evaporative emission engine family shall be plotted as a function of mileage, and a least-squares fit straight line shall be drawn through the data. The evaporative emission deterioration factor is defined as the interpolated 50,000 mile value on that line minus the extrapolated 4,000 mile value on that line, but in no case shall the factor be less than zero.

OR

- ii. The manufacturer shall propose in his preliminary application for approval a method for durability testing and for determination of a deterioration factor for each evaporative emission engine family. The Executive Officer shall review such method and shall approve it if it meets the following requirements: a) The method shall cycle and test the complete evaporative emission control system for the equivalent of at least 50,000 miles of typical customer use. b) The method must reflect the flow of liquid and gaseous fuel through the evaporative emission control system, and the exposure (both peak and cyclical) to heat, vibration, and ozone expected through 50,000 miles of typical customer use. c) The method must have specifications for acceptable system performance, including maximum allowable leakage after 50,000 miles of typical customer use.

No evaporative emission control system durability testing shall be required for 1978 model year vehicles which do not require exhaust emission control system durability testing unless the Executive Officer determines that durability performance is likely to be significantly inferior to 1977 model year systems.

- b. For 1979 and later model evaporative emission engine families, both (4)(a)(i) and (4)(a)(ii) shall apply to all families selected for exhaust emission durability testing and (4)(a)(ii) shall apply to those evaporative emission engine families which are not subject to testing for exhaust emission durability. The deterioration factors determined under (4)(a)(i), if any, shall be averaged with the deterioration factors determined under (4)(a)(ii) to determine a single evaporative emission deterioration factor for each evaporative emission engine family.
5. Approval of heavy-duty vehicles, excluding medium-duty vehicles, shall be based on an engineering evaluation of the system and data submitted by the applicant. Such evaluation may include successful public usage on light-duty or medium-duty vehicles, adequate capacity of storage containers, routing of lines to prevent siphoning, and other emission-related factors deemed appropriate by the Executive Officer. In the event that the U.S. Environmental Protection Agency does not grant California a waiver to implement Section 3 of this procedure, then Section 5 shall also apply to medium-duty vehicles.

State of California  
AIR RESOURCES BOARD

Resolution 76-38

October 5, 1976

WHEREAS, Section 39601 of the Health and Safety Code authorizes the Air Resources Board to adopt standards, rules, and regulations necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law;

WHEREAS, Sections 43101 and 43104 of the Health and Safety Code authorize the Board to adopt vehicle emission standards and test procedures in order to control or eliminate air pollution caused by motor vehicles;

WHEREAS, the Board has found that more stringent heavy-duty engine exhaust emission standards for hydrocarbons and oxides of nitrogen are needed to achieve the ambient air quality standards in the South Coast Air Basin and in other areas of the State;

WHEREAS, on August 27, 1976 the Air Resources Board staff met with representatives of the major heavy-duty engine manufacturers to discuss the costs and technological feasibility of more stringent exhaust emission standards for heavy-duty engines;

WHEREAS, based on information presented at the August 27 meetings and on information previously submitted to the Board and to the U. S. Environmental Protection Agency the Board has found that more stringent heavy-duty engine emission standards are both technologically feasible and cost/effective;

WHEREAS, on May 24, 1976 the U.S. Environmental Protection Agency proposed revisions to its exhaust emission standards and test procedures for heavy-duty engines and vehicles to be effective beginning with the 1979 model year; and

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of the Administrative Procedure Act (Government Code, Title 2, Division 3, Part 1, Chapter 4.5);

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby amends its regulations in Article 2, Subchapter 1, Chapter 3 of Title 13, California Administrative Code as follows:

1. Amend Section 1956(d) to read:

- (d) Exhaust emissions from new 1978 model-year gasoline-fueled heavy-duty engines and vehicles, except medium-duty vehicles, shall not exceed:



(1) Hydrocarbons plus oxides of nitrogen (as NO<sub>2</sub>) - 5 grams per brake horsepower hour

(2) Carbon monoxide - 25 grams per brake horsepower hour

or

(1) Hydrocarbons - 1.0 gram per brake horsepower hour

(2) Carbon monoxide - 25 grams per brake horsepower hour

(3) Oxides of nitrogen (as NO<sub>2</sub>) - 7.5 grams per brake horsepower hour

These two sets of standards shall be alternatives. A manufacturer shall have the option for each engine family of showing compliance with either set.

The test procedures for determining compliance with these standards are those set forth in "California Exhaust Emission Standards and Test Procedures for 1975 to 1978 Model-Year Gasoline-Fueled Heavy-Duty Engines and Vehicles," dated February 19 1975, amended April 16, 1975, July 15, 1975, March 31, 1976, and October 5, 1976.

2. Adopt a new section 1956.5 as follows:

1956.5 Exhaust Emission Standards and Test Procedures - 1979 and Subsequent Model-Year Heavy-Duty Vehicles.

(a) The exhaust emissions from new 1979 and subsequent model-year heavy-duty engines and vehicles, except medium-duty vehicles, shall not exceed:

Exhaust Emission Standards  
(grams per brake horsepower hour)

<u>Model Year</u>	<u>Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Oxides of Nitrogen (NO<sub>2</sub>)</u>	<u>Hydrocarbons plus Oxides of Nitrogen (NO<sub>2</sub>)</u>
1979	1.5	25	7.5	-
1979 OR*	-	25	-	5
1980	1.0	25	-	6.0
1980 OR*	-	25	-	5
1981	1.0	25	-	6.0
1981 OR*	-	25	-	5
1982	1.0	25	-	6.0
1982 OR*	-	25	-	5
1983 and subsequent	0.5	25	-	4.5

\*The two sets of standards for each model year shall be alternatives. A manufacturer shall have the option for each engine family of showing compliance with either set.

(b) The test procedures for determining compliance with these standards are set forth in "California Exhaust Emission Standards and Test Procedures for 1979 and Subsequent Model-Year Heavy-Duty Engines and Vehicles," adopted October 5, 1976.

(c) A manufacturer may elect to certify heavy-duty vehicles of less than 10,000 pounds maximum gross vehicle weight rating as medium-duty vehicles under Section 1959 of this chapter, in which event heavy-duty emission standards and test procedures shall not apply.

3. Amend Section 1957(d) to read:

(d) Exhaust emissions from new 1978 model-year Diesel-fueled heavy-duty engines and vehicles, except medium-duty vehicles, shall not exceed:

(1) Hydrocarbons plus oxides of nitrogen (as  $\text{NO}_2$ ) - 5 grams per brake horsepower hour

(2) Carbon monoxide - 25 grams per brake horsepower hour

or

(1) Hydrocarbons - 1.0 gram per brake horsepower hour

(2) Carbon monoxide - 25 grams per brake horsepower hour

(3) Oxides of nitrogen (as  $\text{NO}_2$ ) - 7.5 grams per brake horsepower hour

These two sets of standards shall be alternatives. A manufacturer shall have the option for each engine family of showing compliance with either set.

The test procedures for determining compliance with these standards are those set forth in "California Exhaust Emission Standards and Test Procedures for 1975 to 1978 Model-Year Diesel-Fueled Heavy-Duty Engines and Vehicles," dated December 19, 1973, test amended October 5, 1976.

A manufacturer may elect to certify heavy-duty vehicles of less than 10,000 pounds maximum gross vehicle weight rating as medium-duty vehicles under Section 1959 of this chapter, in which event heavy-duty emission standards and test procedures shall not apply.

BE IT FURTHER RESOLVED, that the Board hereby adopts the "California Exhaust Emission Standards and Test Procedures for 1975 and 1978 Model-Year Gasoline-Fueled Heavy-Duty Engines and Vehicles," dated February 19, 1975, amended April 16, 1975, July 15, 1975, March 31, 1976, and October 5, 1976; "California Exhaust Emission Standards and Test Procedures for 1979 and Subsequent Model-Year Heavy-Duty Engines and Vehicles," dated October 5, 1976; and "California Exhaust Emission Standards and Test Procedures for 1975 to 1978 Model-Year Diesel-Fueled Heavy-Duty Engines and Vehicles," dated December 19, 1973, last amended October 5, 1976.

STATE OF CALIFORNIA

AIR RESOURCES BOARD

CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES  
FOR 1975 AND-SUBSEQUENT TO 1978 MODEL-YEAR GASOLINE-FUELED  
HEAVY-DUTY ENGINES AND VEHICLES

*Note: These procedures are printed in a style to indicate the adopted changes. New text is underlined and deleted portions are noted.*

ADOPTED: December 19, 1973  
AMENDED: June 12, 1974  
AMENDED: August 8, 1974  
AMENDED: February 19, 1975  
AMENDED: April 16, 1975  
AMENDED: July 15, 1975  
AMENDED: March 31, 1976  
AMENDED: October 5, 1976

CALIFORNIA EXHAUST EMISSION STANDARDS  
AND TEST PROCEDURES  
FOR 1975 AND-SUBSEQUENT TO 1978 MODEL-YEAR GASOLINE-FUELED  
HEAVY-DUTY ENGINES AND VEHICLES

The provisions of Subpart H, Emission Regulations for new Gasoline-Fueled Heavy-Duty Engines, Part 85, Title 40, Code of Federal Regulations, as they existed on January 1, 1975, are hereby adopted as California's Exhaust Emission Standards and Test and-Approval Procedures for 1975 and Subsequent to 1978 Model-Year Gasoline-Fueled Heavy-Duty Engines and Vehicles with the following exceptions and additions:

1. ~~This procedure is applicable to new gasoline-fueled-heavy-duty engines-and-vehicles-beginning-with-the~~ 1975 to 1978 engine model-year gasoline fueled heavy-duty engines and vehicles. Beginning with the 1978 model year, this procedure shall not be applicable to medium-duty vehicles. A manufacturer may elect to certify heavy-duty vehicles 10,000 pounds maximum gross vehicle weight rating or less as medium-duty vehicles, in which event heavy-duty standards and test procedures will not apply.
2. Definitions.

Any applicable definition in the California Health and Safety Code, Division 26, or in the California Vehicle Code as incorporated into Division 26, shall apply, and if inconsistent with any definition in these test procedures these Codes shall take precedence.

  - a. "Administrator" means the Executive Officer of the Air Resources Board.
  - b. "Certificate of Conformity" means "Executive Order" certifying vehicles for sale in California.
  - c. "Certification" means certification as defined in Section 39018 of the Health and Safety Code.
  - d. "Heavy-duty engine" means an engine which is used to propel a heavy-duty vehicle.
  - e. "Heavy-duty vehicle" means any motor vehicle having a manufacturer's gross vehicle weight rating greater than 6,000 pounds, except passenger cars.
  - f. "Medium-duty vehicle" means any heavy-duty vehicle having a manufacturer's gross vehicle weight rating of 8500 pounds or less.
3. Any reference to vehicle or engine sales throughout the United States shall mean vehicle or engine sales in California.

4. Regulations concerning EPA hearings, EPA inspections and specific language on the Certificate of Conformity shall not be applicable to this procedure.
5. Durability data submitted pursuant to subparagraph 85.774-5(e) may be from engines previously certified or approved by EPA or ARB.
6. The requirements in subparagraphs 85.774-28(c)(1)(ii) (durability engines must meet emission standards) shall refer to Federal emission standards.
7. Labeling required pursuant to paragraph 85.774-35 shall also conform to Section 43200 of the California Health and Safety Code, and to Section 1965 of Title 13, California Administrative Code.
8. A statement must be supplied that the production engines shall be in all material respects the same as those for which approval certification was granted.
9. If an engine manufacturer requires the use of unleaded fuel, a statement will be required that the engine and transmission combinations for which approval certification is requested are designed to operate satisfactorily on a gasoline having a research octane number not greater than 91.
10. The average brake horsepower at each mode shall be reported for all emission tests.
11. A vehicle manufacturer shall provide the following in his application:
  - a. Identification and description of the vehicle models for which approval certification is requested.
  - b. Identification and description of the engines to be used in these vehicle models.
  - c. References to the engine manufacturer's Executive Order approving certifying these engines.
12. The following standards represent the maximum projected exhaust emissions for new gasoline-fueled heavy-duty engines.

<u>Engine Model Year</u>	Exhaust Emission Standards (grams/brake-horsepower hour)	
	<u>Hydrocarbons plus Oxides of Nitrogen (as NO<sub>2</sub>)</u>	<u>Carbon Monoxide</u>
1975	10	30
1976	10	30
1977* - subsequent years	5	25

<u>Alternate Standards</u>	<u>Hydrocarbons</u>	<u>Oxides of Nitrogen</u>	<u>Carbon Monoxide</u>
1977* - Subsequent Years	1.0**	7.5**	25**

\*These two sets of standards shall be alternatives. A manufacturer shall have the option for each engine family of showing compliance with either set.

\*\*The projected exhaust emissions values for these optional standards shall be determined from separate deterioration factors for Hydrocarbons, Carbon Monoxide and Oxides of Nitrogen.

STATE OF CALIFORNIA

AIR RESOURCES BOARD

CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES  
FOR 1975 ~~AND-SUBSEQUENT~~ TO 1978 MODEL-YEAR DIESEL-FUELED  
HEAVY-DUTY ENGINES AND VEHICLE

*Note: These procedures are printed in a style to indicate the adopted changes. New text is underlined and deleted portions are noted.*

ADOPTED: December 19, 1973

AMENDED: August 8, 1974

AMENDED: April 16, 1975

AMENDED: July 15, 1975

AMENDED: March 31, 1976

AMENDED: October 5, 1976



CALIFORNIA EXHAUST EMISSION STANDARDS  
AND TEST PROCEDURES FOR  
1975 AND-SUBSEQUENT TO 1978 MODEL-YEAR DIESEL-FUELED  
HEAVY-DUTY ENGINES AND VEHICLES

The provisions of Subpart J, Engine Exhaust Emission Regulations for New Diesel Heavy-Duty Engines, Part 85, Title 40, Code of Federal Regulations (40 CFR 85), as they existed on May 24, 1974, are hereby adopted as California Exhaust Emission Standards and Test Procedures for 1975 to 1978 and Subsequent Model-Year Diesel-Fueled Heavy-Duty Engines and Vehicles with the following exceptions and additions:

85.901 General applicability.

Not adopted. This procedure is applicable to new diesel fueled-heavy-duty-engines-and-vehicles-beginning-with-the 1975 to 1978 engine model year Diesel fueled heavy duty engines and vehicles. Beginning with the 1978 model-year, this procedure shall not be applicable to medium-duty vehicles.

A manufacturer may elect to certify heavy-duty vehicles 10,000 pounds maximum gross vehicle weight rating or less as medium-duty vehicles, in which event heavy-duty emission standards and test procedures will not apply.

85.902 Definitions.

Adopted, except as follows:

- (a)(2) "Administrator" means the Executive Officer of the Air Resources Board.
- (3) "Engine model year" means the manufacturer's annual production period of new motor vehicle engines (as determined by the Executive Officer) which includes January 1 of such year; provided, that if the manufacturer has no annual production period, the term "engine model year" shall mean the calendar year.

Additional Definitions:

- (i) "Certificate of Conformity" means "Executive Order" certifying engines or vehicles for sale in California.
- (ii) "Certification" means certification as defined in Section 39018 of the Health and Safety Code.
- (iii) "Maximum rated horsepower" means the maximum brake horsepower output of an engine as stated by the manufacturer in his sales and service literature and his application for approval certification.
- (iv) "Exhaust emission control system" means an exhaust emission control component as indicated in Appendix VI of the Federal Register plus all controls used as additional sensing devices.

- (v) "Auxiliary emission control device" means any element of design which senses temperature, pressure, vehicle speed, engine speed, transmission gear, engine or carburetor vacuum or any other parameter to activate, modulate, delay or deactivate the operation of any part of an emission control system.
- (vi) "Subpart" means this Test Procedure.
- (vii) "Heavy-duty engine" means an engine which is used to propel a heavy-duty vehicle.
- (viii) "Heavy-duty vehicle" means any motor vehicle having a manufacturer's gross vehicle weight rating greater than 6,000 pounds, except passenger cars.
- (ix) "Medium-duty vehicle" means any heavy-duty vehicle having a manufacturer's gross vehicle weight rating of 8500 pounds or less.
- (x) Any applicable definition in the California Health and Safety Code, Division 26, or in the California Vehicle Code as incorporated into Division 26, shall apply, and if inconsistent with any definition in this Test Procedure, shall take precedence.

85.903 Abbreviations

Adopted.

85.904 General Standards: increase in emissions, unsafe conditions.

Adopted except as follows:

- (a)(1) No new heavy duty motor vehicle may be sold in California unless it is equipped with an engine certified by the Executive Officer.

85.905 Hearings on certification.

Not adopted.

85.906 Maintenance of records, submittal of information; right of entry.

Adopted except for (a)(5), (durability engine fleet not required).

85.974-1 Exhaust gaseous emission standards for 1975 and subsequent model year engines.

- (a)(1) Not adopted.

Exhaust gaseous emissions from new 1975 and 1976 heavy-duty diesel engines shall not exceed:

Hydrocarbons plus oxides of nitrogen (as NO<sub>2</sub>) - 10 grams per brake horsepower hour.

Carbon Monoxide - 30 grams per brake horsepower hour.

Exhaust gaseous emissions from 1977\* and subsequent heavy duty diesel engines shall not exceed:

Hydrocarbons plus oxides of nitrogen (as NO<sub>2</sub>) - 5 grams per brake horsepower hour.

Carbon Monoxide - 25 grams per brake horsepower hour.

or

Hydrocarbons - 1.0 grams per brake horsepower hour

Carbon Monoxide - 25 grams per brake horsepower hour

Oxides of Nitrogen (as NO<sub>2</sub>) - 7.5 grams per brake horsepower hour.

(a)(2) Adopted.

85.974-2 Application for certification.

Adopted for engine manufacturers with the following exception: "Projected U. S. sales data" in (a)(2) shall mean "projected California sales data".

The vehicle manufacturer shall provide the following in his application:

- i) Identification and description of the vehicle models with respect to which approval certification is requested.
- ii) Identification and description of the engines to be used in these vehicle models.
- iii) The engine manufacturer's Executive Order certifying these engines shall be referenced.

No durability fleet or smoke emission tests will be required and any reference to durability testing shall be optional. No deterioration factors shall be used for calculating the emission test results.

Evidence must be submitted to the Executive Officer to demonstrate the durability of the emission control system. Such evidence may include durability test data and/or an engineering evaluation of the system. This evaluation will be based on previous experience and/or similarity to previously approved systems.

85.974-3 Approval of procedure and equipment; test fleet selection.

Adopted.

85.974-4 Required data.

Adopted, except for (a).

\*These two sets of standards shall be alternatives. A manufacturer shall have the option for each engine family of showing compliance with either set.

85.974-5 Test engines.

Adopted for emission test engines. (Reference 85.874-5(a,b))

85.974-6 Maintenance.

Adopted, except for (a)(1).

85.974-7 Service accumulation and emission measurements.

Adopted except for (b).

85.974-8 Special test procedures.

Adopted.

85.974-9 Test procedures.

Adopted.

85.974-10 Diesel fuel specifications.

Adopted.

85.974-11 through 85.974-18 Relating to testing.

Adopted.

85.974-28 Compliance with emission standards.

Not adopted. The 125 hour test shall be the acceptable emission test. No deterioration factors shall be used.

85.974-29 Testing by the Administrator.

Adopted, except for durability data requirement (b)(4).

85.974-30 through 85.974-31 Relating to Certification.

Adopted, except 85.974-30(c). A statement must be supplied that the production engines shall be in all material respects the same design as those for which approval certification was granted. Section 85.905 (hearing) not applicable. Language specified for certificate of conformity not applicable.

85.974-32 Addition of an engine after certification.

Adopted.

85.974-33 Changes to an engine covered by certification.

Adopted.

85.974-34 Alternative procedure for notification of additions and changes.

Adopted.

85.974-35 Labeling.

Adopted. Labeling shall also conform to Section 43200, Health and Safety Code and Section 1967, Title 13, California Administrative Code.

85.974-37 Production engines.

Adopted. Except that under (2) the "number of engines produced for sale in the United States" shall be replaced by that "number of engines produced for sale in California".

85.974-38 Maintenance instructions.

Adopted.

85.974-39 Submission of maintenance instructions.

Adopted.

California Exhaust Emission Standards and Test Procedures  
For 1979 and Subsequent Model Year Heavy Duty  
Engines and Vehicles

The heavy duty provisions of Subpart A, Part 86, Title 40, Code of Federal Regulations (40 CFR 86), as they existed on June 30, 1975, are hereby adopted as California Exhaust Emission Standards and Test Procedures for 1979 and Subsequent Model Year Heavy Duty Engines and Vehicles with the following additions and exceptions:

86.077-1 General applicability

Not adopted. This procedure is applicable to heavy duty engines and vehicles beginning with the 1979 model year except medium duty vehicles. A manufacturer may elect to certify heavy-duty vehicles of 10,000 pounds maximum gross vehicle weight rating or less as medium duty vehicles, in which event heavy duty standards and test procedures will not apply

86.077-2 Definition.

Adopted with the following additions:

The proposed amendments specified by 86.079-2 of the Federal Register (Vol. 41, No. 101-Monday, May 24, 1976).

Any applicable definition in the California Health and Safety Code, Division 26, or in the California Vehicle Code as incorporated into Division 26, shall apply, and if inconsistent with any definition in these test procedures these Codes shall take precedence.

- a. "Administrator" means the Executive Officer of the Air Resources Board.

- b. "Certificate of Conformity" means "Executive Order" certifying vehicles for sale in California.
- c. "Certification" means "approval" certification as defined in Section 39018 of the Health and Safety Code.
- d. "Heavy-duty engine" means an engine which is used to propel a heavy duty vehicle.
- e. "Heavy duty vehicle" means any motor vehicle having a manufacturer's gross vehicle weight rating greater than 6,000 pounds, except passenger cars.
- f. "Medium duty vehicle" means any heavy duty vehicle having a manufacturer's gross vehicle weight rating of 8500 pounds or less.
- g. "Projected United States sales" means projected California sales.

86.077-3 Abbreviations.

Adopted.

86.077-4 Section numbering; construction.

Not adopted.

86.077-5 General standards; increase in emissions; unsafe conditions.

Adopted except for 86.077(a)(2) which is replaced by:

No new heavy duty vehicles may be sold in California unless it is equipped with an engine certified by the Executive Officer.

86.077-6 Hearings on certification.

Not adopted.

86.077-7 Maintenance of records; submittal of information; right of entry.

Adopted except those sections pertaining to EPA inspections and diesel smoke emissions.

86.077-8 Emission standards for 1977 light duty vehicles.

Not adopted.

86.077-9 Emission standards for 1977 light duty trucks.

Not adopted.

86.077-10 Emission standards for 1977 gasoline-fueled heavy duty engines.

Not adopted.

The following standards represent the maximum projected exhaust emissions for new gasoline-fueled heavy duty engines.

Engine Model Year	Exhaust Emission Standards (grams/brake horsepower-hour)	
	Hydrocarbon plus Oxides of Nitrogen	Carbon Monoxide
1979*	5	25
1980 to 1982*	5	25

	Alternate Exhaust Emission Standards (grams/brake horsepower-hour)			
	Hydrocarbon	Carbon Monoxide	Hydrocarbon plus Oxides of Nitrogen	Oxides of Nitrogen
1979*	1.5**	25**	Not applicable	7.5**
1980 to 1982*	1.0**	25**	6.0	Not Applicable
1983-Subsequent Years	0.5**	25**	4.5	Not applicable

\*These two set of standards shall be alternatives. A manufacturer shall have the option for each engine family of showing compliance with either set.

\*\*The projected exhaust emissions value for these optional standards shall be determined from separate deterioration factors for hydrocarbon, carbon monoxide, and oxides of nitrogen.



The proposed amendments other than exhaust emissions and crankcase emissions specified by 86.079-10 of the Federal Register (Vol. 41, No. 101 - Monday, May 24, 1976) are adopted).

86.077-11 Emissions standards for 1977 Diesel heavy duty engines.

Not adopted.

Exhaust gaseous emissions from new 1979\* heavy duty engines shall not exceed:

Hydrocarbons plus oxides of nitrogen - 5 grams/brake horsepower-hour

Carbon Monoxide - 25 grams/brake horsepower-hour

or

Hydrocarbons - 1.5 grams/brake horsepower-hour

Oxides of Nitrogen - 7.5 grams/brake horsepower-hour

Carbon Monoxide - 25 grams/brake horsepower-hour

Exhaust gaseous emissions from new 1980 to 1982\* heavy-duty diesel engines shall not exceed:

Hydrocarbons and oxides of nitrogen - 5 grams/brake horsepower-hour

Carbon Monoxide - 25 grams/brake horsepower-hour

or

Hydrocarbons - 1.0 grams/brake horsepower-hour

Hydrocarbons and Oxides of Nitrogen - 6.0 grams/brake horsepower-hour

Carbon Monoxide - 25 grams/brake horsepower-hour

Exhaust gaseous emissions from 1983 and subsequent heavy duty Diesel engines shall not exceed:

Hydrocarbons - 0.5 grams/brake horsepower-hour

Hydrocarbons and oxides of nitrogen - 4.5 grams/brake horsepower-hour

Carbon Monoxide - 25 grams/brake horsepower-hour

\*These two sets of standards shall be alternatives. A manufacturer shall have the option of each engine family of showing compliance with either set.

The proposed amendments other than exhaust emissions and smoke emissions specified by 86.079-11 of the Federal Register (Vo. 41, No. 101 - Monday, May 24, 1976) are adopted.

86.077-12 to 86.077-20 [Reserved]

Not adopted.

86.077-21 Application for certification.

Adopted with the following addition:

The vehicle manufacturer shall provide the following in his application:

- i) Identification and description of the vehicle models with respect to which certification is requested.
- ii) Identification and description of the engines to be used in these vehicle models.
- iii) The engine manufacturer's Executive Order certifying these engines shall be referenced.

86.077-22 Approval of application for certification; test fleet selections.

Adopted except for those sections pertaining to EPA hearing.

86.077-23 Required data.

Adopted with the following addition:

The proposed amendments specified by 86.079-23 of the Federal Register (Vol. 41, No. 101 - Monday, May 24, 1976).

No durability fleet or smoke emissions tests will be required for diesel-fueled engines. Evidence must be submitted to the Executive Officer to demonstrate the durability of the emission control system installed on diesel-fueled engines. Such evidence may include durability test data and/or an engineering evaluation of the system. This evaluation shall be based on previous experience and/or similarity to previous approved systems.

86.077-24 Test vehicles and engines.

Adopted with the following addition:

The proposed amendments specified by 86.079-24 of the Federal Register (Vol. 41, No. 101 - Monday, May 24, 1976).

Engine manufacturers will be permitted to carry over durability and/or emission test data from the 1978 to 1979 model year for similar engines notwithstanding changes to the test procedure.

86.077-25 Maintenance.

Adopted with the following addition:

The proposed amendments specified by 6.079-25 of the Federal Register (Vol. 41, No. 101 - Monday, May 24, 1976). Those sections pertaining to diesel durability data engines and smoke emissions are not adopted.

86.077-26 Mileage and service accumulation; emission measurements.

Adopted with the following addition:

The proposed amendments specified by 86.079-26 of the Federal Register (Vol. 41, No. 101 - Monday, May 24, 1976). Those sections pertaining to Diesel durability data engines are not adopted.

86.077-27 Special test procedures.

Adopted with the following addition:

The proposed amendments specified by 86.079-27 of the Federal Register (Vol. 41, No. 101- Monday, May 24, 1976). Those sections pertaining to smoke emissions are not adopted.

86.077-28 Compliance with emission standards.

Adopted with the following additions:

The proposed amendments specified by 86.079-28 of the Federal Register (Vol. 41, No. 101- Monday, May 24, 1976). Those sections pertaining to smoke emissions and Diesel durability data engine are not adopted.

The effects reported from industrial experience with human exposures to  $\text{SO}_2$  are not consistent. For example, Anderson<sup>(23)</sup> reported that prolonged exposure to levels of  $\text{SO}_2$  far in excess of urban concentrations caused no adverse effects. Skälpe,<sup>(22)</sup> however, found that approximately the same range of concentrations was associated with increased frequencies of cough, expectoration and dyspnea on exertion among workers in pulp mills.

This conflict in observations may be the result of the selection process that occurs in making occupational choices. Either by self-selection or by pre-placement medical examinations, persons who are specifically sensitive or persons having major respiratory impairment may have been eliminated from these industrial situations; still others may leave such work after finding themselves to be sensitive. Thus, the population at risk in the occupational environment differs markedly from the community as a whole.

As reported in the preceding discussion, synergistic effects from exposures to the mixture of  $\text{SO}_2$  and a saline aerosol have been shown in the guinea pig. The data from experiments related to the effects of particulate materials on the response of human subjects to  $\text{SO}_2$  are conflicting.<sup>(83)</sup> Four studies dealt with the effects of sodium chloride aerosol on the human response to  $\text{SO}_2$ . The results of these studies are not in agreement. There is one study that deals with the more critical question of the effects of oxidizing aerosols.<sup>(67)</sup>

Frank, et. al.,<sup>(68)</sup> examined the response of a panel of 10 healthy males to 1, 5 and 15 ppm  $\text{SO}_2$  with and without the addition of sodium chloride aerosol. When the agents were given in sequence it was found that the

Separate deterioration factors shall be established, where applicable, for HC, CO, NOx and/or the combined emissions of HC and NOx for gasoline-fueled engines.

The requirement in 86.079-28 (b)(4)(B) concerning interpolated 125 hour and 1500 hour values apply to Federal emission standards.

The 125 hour test for Diesel-fueled engines shall be used to determine compliance with the exhaust emission standards as set forth by 86.077-11 of this test procedure. No deterioration factors shall be used for Diesel-fueled engines.

#### 86.077-29 Testing by the Administrator.

Adopted.

#### 86.077-30 Certification.

Adopted except for the following:

Regulations concerning specific language on certificate of conformity, EPA hearing and EPA inspections shall not be applicable to this procedure.

In addition the following statements must accompany the application.

1. A statement must be supplied that the production engines shall be in all material respects the same as those for which certification was granted.

2. If an engine manufacturer requires the use of unleaded fuel, a statement will be required that the engine and transmission combinations for which certification is requested are designed to operate satisfactorily on a gasoline having a research octane number not greater than 91.
3. The average brake horsepower at each mode shall be reported for all emission tests.

86.077-31 Separate certification.

Adopted.

86.077-32 Addition of a vehicle or engine after certification.

Adopted.

86.077-33 Changes to a vehicle or engine covered by certification.

Adopted.

86.077-34 Alternative procedure for notification of additions and changes.

Adopted.

86.077-35 Labeling.

Adopted with the following addition:

The proposed amendments specified by 86.079-35 of the Federal Register (Vol. 41, No. 101 - Monday, May 24, 1976).

Labeling shall also conform to Section 43200 of the California Health and Safety Code and Sections 1965 or 1967, where applicable, of Chapter 3, Title 13 California Administrative Code.

86.077-36 Submission of vehicle identification numbers.

Not adopted.

86.077-37 Production vehicles and engines.

Adopted.

86.077-38 Maintenance instruction.

Adopted.

86.077-39 Submission of maintenance instructions.

Adopted.

86.078-8 Emission standards for 1978 light-duty vehicles.

Not adopted.

The provisions of Subpart D, Part 86, Title 40, Code of Federal Regulations (40 CFR 86), as proposed in the Federal Register (Vol. 41, No. 101 - Monday, May 24, 1976) are adopted with the exception of those sections pertaining to smoke emissions.



State of California

AIR RESOURCES BOARD

Resolution 76-39

October 8, 1976

WHEREAS, the federal Clean Air Act (§ 110) and Environmental Protection Agency regulations adopted pursuant thereto (40 CFR 51.12(b)) require that State Implementation Plans contain rules and regulations which prohibit the construction of a new emission source, or a modification to an existing source, where the same will interfere with or prevent the attainment or maintenance of a national air quality standard;

WHEREAS, Health and Safety Code §§ 40001 and 41507 require districts to adopt, as part of the State Implementation Plan required by § 110 of the Clean Air Act, rules and regulations which endeavor to achieve and maintain the national standards, and authorize the Board to order revision of district rules and regulations where necessary to that end;

WHEREAS, Health and Safety Code § 42301 requires that district permit systems prohibit the issuance of a permit for the construction, alteration, use or operation of any emission source where the same will prevent or interfere with the attainment or maintenance of any applicable air quality standard;

WHEREAS, the Board is empowered by Health and Safety Code §§ 41500, 41502 and 41504 to review the rules and regulations of a district to determine whether they make reasonable provision to achieve and maintain state air quality standards and, after a public hearing, establish rules and regulations for a district which so provide if the district has not established such rules and regulations;

WHEREAS, the Board adopted on October 28, 1975 suggested new source review rules which meet the aforesaid state and federal mandates, and by letter dated November 26, 1975, requested the Southern California Air Pollution Control District to adopt the suggested new source review rules or equivalent rules;

WHEREAS, the Board finds that the Southern California Air Pollution Control District has not adopted new source review rules or regulations which adequately require the denial of a permit for the construction, alteration, use or operation of emission sources which will prevent or interfere with the attainment or maintenance of the state ambient air quality standards;

WHEREAS, the Board finds that without new source review rules substantially equivalent to those proposed for adoption by the staff of the Board, the rules and regulations of the Southern California Air Pollution Control District do not make reasonable provision to achieve and maintain the state ambient air quality standards;

WHEREAS, the Board finds that the Southern California Air Pollution Control District has failed to adopt new source review rules which meet the aforesaid federal requirements for State Implementation Plans; and

WHEREAS, the Board had conducted a public hearing and given notice thereof in accordance with all requirements of federal and state law;

NOW, THEREFORE, BE IT RESOLVED, that the Board amends the rules and regulations of the Southern California Air Pollution Control District by adopting therein Rules 213, 213.1 and 213.2, as amended;

BE IT FURTHER RESOLVED, that the aforesaid Rules 213, 213.1 and 213.2 as amended shall become effective immediately; and

BE IT FURTHER RESOLVED, that the aforesaid Rules 213, 213.1 and 213.2 as amended shall apply to any subject application for a permit filed with the District, but not finally ruled upon, prior to the aforesaid effective date.

BE IT FURTHER RESOLVED, that the staff of the Board, together with the staff of the District, monitor the implementation of said Rules, and report to the Board the effects on air quality, employment and business in the District by November 1, 1977.

BE IT FURTHER RESOLVED, that Rules 213, 213.1 and 213.2 as amended may not be amended except by the Board, or by the District provided that the Executive Officer finds that any amendment thereto made by the District does not impair the effectiveness or stringency of these rules.

SOUTHERN CALIFORNIA AIR POLLUTION CONTROL DISTRICT  
NEW SOURCE REVIEW RULES

RULE 213. Standards for Permits to Construct: Air Quality Impact

(a) General:

The Air Pollution Control Officer shall deny a permit to construct for any unit or units of a stationary source that fail to meet the applicable requirements of subsection (b) or (c) of this Rule.

(b) Best Available Control Technology:

1. New Stationary Sources:

The Air Pollution Control Officer shall deny a permit to construct for any unit or units constituting a new stationary source if such source will emit more than 15 pounds per hour or 150 pounds per day of nitrogen oxides, organic gases, or any contaminant for which there is a state or national ambient air quality standard (except carbon monoxide, for which the limits are 150 pounds per hour and 1500 pounds per day) unless the applicant shows that the new source is constructed using best available control technology.

2. Modifications to Existing Stationary Sources:

The Air Pollution Control Officer shall deny a permit to construct for any modification of any existing stationary source if such source after modification will emit more than 15 pounds per hour or more than 150 pounds per day of nitrogen oxides,

organic gases, or any air contaminant for which there is a state or national ambient air quality standard (except carbon monoxide, for which the limits are 150 pounds per hour and 1500 pounds per day), unless the applicant demonstrates that the modification of the existing stationary source will be constructed using best available control technology, and:

- A. That the modification would not result in a net increase in emissions of any pollutant affected by this Rule; or
- B. That best available control technology is being, or is to be, applied to all existing units of the stationary source; or
- C. That emissions from all of the existing units of the stationary source are controlled by use of technology that is at least as effective as that generally in use on similar stationary sources, and that the cost of installing best available control technology on existing units is economically prohibitive and substantially exceeds the cost per unit mass of controlling emissions of each pollutant through all other control measures; or
- D. That the stationary source is a small business, as defined in subsection (1) of Section 1896 of Title 2 of the California Administrative Code; that emissions from all existing units of the stationary source are controlled through application of the best technology that is economically

organic gases, or any air contaminant for which there is a state or national ambient air quality standard (except carbon monoxide, for which the limits are 150 pounds per hour and 1500 pounds per day), unless the applicant demonstrates that the modification of the existing stationary source will be constructed using best available control technology, and:

- A. That the modification would not result in a net increase in emissions of any pollutant affected by this Rule; or
- B. That best available control technology is being, or is to be, applied to all existing units of the stationary source; or
- C. That emissions from all of the existing units of the stationary source are controlled by use of technology that is at least as effective as that generally in use on similar stationary sources, and that the cost of installing best available control technology on existing units is economically prohibitive and substantially exceeds the cost per unit mass of controlling emissions of each pollutant through all other control measures; or
- D. That the stationary source is a small business, as defined in subsection (1) of Section 1896 of Title 2 of the California Administrative Code; that emissions from all existing units of the stationary source are controlled through application of the best technology that is economically

reasonable to apply to that stationary source; and that the cost of employing best available control technology is economically prohibitive.

(c) Air Quality Impact Analysis:

1. New Stationary Sources:

The Air Pollution Control Officer shall deny a permit to construct for any unit or units constituting a new stationary source if such source will emit more than 25 pounds per hour or 250 pounds per day of nitrogen oxides, organic gases, or any air contaminant for which there is a state or national ambient air quality standard (except carbon monoxide, for which the limits are 250 pounds per hour and 2500 pounds per day), or which is a precursor of any such air contaminant, unless he determines that the emissions from the new source will not cause a violation of, or will not interfere with the attainment or maintenance of, the state or national ambient air quality standard for that same contaminant (or, in the case of a precursor, for the contaminant to which the precursor contributes).

2. Modifications to Existing Stationary Sources:

The Air Pollution Control Officer shall deny a permit to construct for any modification of any existing stationary source if the modification will result in a net increase in emissions from the existing source of more than 25 pounds per hour or 250 pounds per day of nitrogen oxides, organic gases, or any air contaminant for which there is a state or national ambient air quality standard (except carbon monoxide, for which the limits are 250 pounds per hour and 2500 pounds per day), or which is a precursor of any such air contaminant, unless he

determines that the emissions from the modified source will not cause a violation of, or will not interfere with the attainment or maintenance of, the state or national ambient air quality standard for that same contaminant, (or in the case of a precursor, for that contaminant to which the precursor contributes).

(d) Determination of Emission Increases:

In determining under subsection (b) 2. A. and subsection (c) 2. whether there has been a net increase in emissions and, if so, the amount of any such increase, the Air Pollution Control Officer shall consider all increases and decreases of emissions caused by modifications to that stationary source pursuant to permits to construct issued during the preceding five years, or since the adoption of this Rule, whichever period is shorter. Emission reductions required to comply with federal, state, or district laws, emission limitations, or rules or regulations shall not be considered to be decreases in emissions for the purposes of this subsection.

(e) Consideration of Future Emission Reductions:

In making the analysis required in subsection (h) 2., the Air Pollution Control Officer shall take into consideration the air quality impact of any reduction in the emissions of the same air contaminant which results from the elimination or modification of other existing stationary sources under the same ownership and operating within the same air basin. If reductions are to be based on planned elimination or modification of any stationary sources, the Air Pollution Control Officer shall condition the permit to

determines that the emissions from the modified source will not cause a violation of, or will not interfere with the attainment or maintenance of, the state or national ambient air quality standard for that same contaminant, (or in the case of a precursor, for that contaminant to which the precursor contributes).

(d) Determination of Emission Increases:

In determining under subsection (b) 2. A. and subsection (c) 2. whether there has been a net increase in emissions and, if so, the amount of any such increase, the Air Pollution Control Officer shall consider all increases and decreases of emissions caused by modifications to that stationary source pursuant to permits to construct issued during the preceding five years, or since the adoption of this Rule, whichever period is shorter. Emission reductions required to comply with federal, state, or district laws, emission limitations, or rules or regulations shall not be considered to be decreases in emissions for the purposes of this subsection.

(e) Consideration of Future Emission Reductions:

In making the analysis required in subsection (h) 2., the Air Pollution Control Officer shall take into consideration the air quality impact of any reduction in the emissions of the same air contaminant which results from the elimination or modification of other existing stationary sources under the same ownership and operating within the same air basin. If reductions are to be based on planned elimination or modification of any stationary sources, the Air Pollution Control Officer shall condition the permit to



operate to require such elimination or modification within not more than 90 days after the start-up of the new or modified source.

Emission reductions required to comply with federal, state, or district laws, emission limitations, or rules or regulations shall not be considered to be decreases in emissions for the purposes of this subsection.

(f) Exemptions:

1. The Air Pollution Control Officer shall exempt from the provisions of subsection (c) of this Rule, any new stationary source or modification of any existing stationary source which:
  - A. Will be in whole or in part a replacement for an existing stationary source at the same location if the resulting emissions of any air contaminant will not be increased.  
The Air Pollution Control Officer may allow a maximum of 90 days as a start-up period for simultaneous operation of the existing stationary source or replaced portions thereof, and the new stationary source or replacement; or
  - B. Will cause demonstrable air quality benefits within the air basin, provided however, that the written concurrence of the California Air Resources Board and United States Environmental Protection Agency shall be obtained prior to the granting of an exemption hereunder; or

- C. Will be used exclusively for providing essential public services such as schools, hospitals, or police and fire fighting facilities, but specifically excluding sources of electrical power generation other than for emergency standby use at essential public service facilities; or
- D. Is exclusively a modification to convert from use of gaseous fuels to fuel oil because of demonstrable shortages of gaseous fuels, provided that all units constituting the modification will utilize best available control technology. Modifications for the purpose of this paragraph shall include the addition or modification of facilities for storing, transferring and/or transporting such fuel oil at the stationary sources. A condition shall be placed on the operating permit requiring conversion to gaseous or other equivalent low polluting fuels when they are, or become, available; or
- E. Is air pollution control equipment which, when in operation, will reduce emissions from an existing source; or
- F. Is portable sandblasting equipment used on a temporary basis within the air basin.

- C. Will be used exclusively for providing essential public services such as schools, hospitals, or police and fire fighting facilities, but specifically excluding sources of electrical power generation other than for emergency standby use at essential public service facilities; or
- D. Is exclusively a modification to convert from use of gaseous fuels to fuel oil because of demonstrable shortages of gaseous fuels, provided that all units constituting the modification will utilize best available control technology. Modifications for the purpose of this paragraph shall include the addition or modification of facilities for storing, transferring and/or transporting such fuel oil at the stationary sources. A condition shall be placed on the operating permit requiring conversion to gaseous or other equivalent low polluting fuels when they are, or become, available; or
- E. Is air pollution control equipment which, when in operation, will reduce emissions from an existing source; or
- F. Is portable sandblasting equipment used on a temporary basis within the air basin.

2. The Air Pollution Control Officer may exempt from the provisions of subsection (c) of this Rule, any new stationary source, or modification of an existing stationary source, which has been determined to be:

- A. A new stationary source or modification of an existing stationary source utilizing unique and innovative control technology which will result in a significantly lower emission rate from the stationary source than would have occurred with the use of previously known best available control technology, and which will likely serve as a model for technology, to be applied to similar stationary sources within the State. In order for a stationary source to be exempted under this paragraph, the applicant must obtain the written concurrence of the California Air Resources Board and the United States Environmental Protection Agency with the Air Pollution Control Officer's determination; or
- B. A new stationary source or modification of an existing stationary source that represents a significant advance in the development of a technology that appears to offer extraordinary environmental or public health benefits or other benefits of overriding importance to the public health or welfare. In order for a stationary source to be exempted under this paragraph, the applicant must obtain the written concurrence of the California Air Resources Board and the United States Environmental Protection Agency with the Air Pollution Control Officer's determination.

(g) Notice Requirements for Proposed Exemptions:

Before granting an exemption under subsection (f) 1. B., (f) 2. A or (f) 2. B. of this Rule, the Air Pollution Control Officer shall publish a notice by prominent advertisement in at least one newspaper of general circulation in the District and shall notify in writing of his intention: the applicant, the United States Environmental Protection Agency, the California Air Resources Board and adjoining air pollution control districts. Calculations and technical data used by the Air Pollution Control Officer as the bases for granting exemptions pursuant to subsection (f) 1. B, (f) 2. A. or (f) 2. B. shall be made available to the California Air Resources Board and United States Environmental Protection Agency. Before granting an exemption under subsection (f) 1. B., (f) 2. A. or (f) 2. B. of this Rule, the Air Pollution Control Officer shall consider any comments received within 30 days after the date of publication or date of notification of the above agencies, whichever occurs later, and shall have obtained the concurrence of the California Air Resources Board and the United States Environmental Protection Agency.

In addition, the Air Pollution Control Officer shall notify in writing the United States Environmental Protection Agency and the California Air Resources Board of the granting of an exemption under subsection (f) 1. A., (f) 1. C. or (f) 1. D.

(g) Notice Requirements for Proposed Exemptions:

Before granting an exemption under subsection (f) 1. B., (f) 2. A or (f) 2. B. of this Rule, the Air Pollution Control Officer shall publish a notice by prominent advertisement in at least one newspaper of general circulation in the District and shall notify in writing of his intention: the applicant, the United States Environmental Protection Agency, the California Air Resources Board and adjoining air pollution control districts. Calculations and technical data used by the Air Pollution Control Officer as the bases for granting exemptions pursuant to subsection (f) 1. B, (f) 2. A. or (f) 2. B. shall be made available to the California Air Resources Board and United States Environmental Protection Agency. Before granting an exemption under subsection (f) 1. B., (f) 2. A. or (f) 2. B. of this Rule, the Air Pollution Control Officer shall consider any comments received within 30 days after the date of publication or date of notification of the above agencies, whichever occurs later, and shall have obtained the concurrence of the California Air Resources Board and the United States Environmental Protection Agency.

In addition, the Air Pollution Control Officer shall notify in writing the United States Environmental Protection Agency and the California Air Resources Board of the granting of an exemption under subsection (f) 1. A., (f) 1. C. or (f) 1. D.

(h) Procedures for Evaluation of Applications for Permits to Construct:

Before granting a permit to construct for any unit of a new stationary source or modification subject to the requirements of subsection

(c) of this Rule, the Air Pollution Control Officer shall:

1. Require the applicant to submit information sufficient to describe the nature and amounts of emissions, location, design, construction, and operation of the source, and to submit any additional information required by the Air Pollution Control Officer to make the analysis required by this Rule.
2. Analyze the effect of the operation of the new or modified stationary source on air quality in the vicinity of the new source or modified stationary source, within the air basin and within adjoining air basins. Such analysis shall consider the air contaminant emissions and air quality in the vicinity of the new source or modified source, within the air basin and within adjoining air basins at the time the new source or modification is proposed to commence normal operation. Such analysis shall be based on the application of existing state and local rules and regulations.
3. Upon completion of the evaluation, but before granting a permit to construct:
  - A. Publish a notice by prominent advertisement in at least one newspaper of general circulation in the District, stating the preliminary decision to grant the permit to construct and where the public may inspect the information required by this subsection. A copy of the notice shall also be

sent to the applicant, the United States Environmental Protection Agency, the California Air Resources Board and adjoining air pollution control districts. The notice shall provide a period of 30 days, beginning on the date of publication, or on the date of notification of that above agencies, whichever occurs later, for the public to submit comments on the application.

- B. Make available for public inspection at the Air Pollution Control District office, except as otherwise limited by law: the information submitted by the applicant, the Air Pollution Control Officer's analysis of the effect of the source on air quality, and the preliminary decision to grant the permit to construct. Such Information shall also be forwarded to the California Air Resources Board for review.
- C. Consider all comments submitted. If within the 30-day notice period the Air Pollution Control Officer receives a written request from either the United States Environmental Protection Agency or California Air Resources Board to defer the Air Pollution Control Officer's decision pending the requesting agency's review of the application, the Air Pollution Control Officer shall honor such request for a period of 60 days from the date of such request.



sent to the applicant, the United States Environmental Protection Agency, the California Air Resources Board and adjoining air pollution control districts. The notice shall provide a period of 30 days, beginning on the date of publication, or on the date of notification of that above agencies, whichever occurs later, for the public to submit comments on the application.

- B. Make available for public inspection at the Air Pollution Control District office, except as otherwise limited by law: the information submitted by the applicant, the Air Pollution Control Officer's analysis of the effect of the source on air quality, and the preliminary decision to grant the permit to construct. Such Information shall also be forwarded to the California Air Resources Board for review.
- C. Consider all comments submitted. If within the 30-day notice period the Air Pollution Control Officer receives a written request from either the United States Environmental Protection Agency or California Air Resources Board to defer the Air Pollution Control Officer's decision pending the requesting agency's review of the application, the Air Pollution Control Officer shall honor such request for a period of 60 days from the date of such request.

(i) Additional Applicant Requirements:

Receipt of a permit to construct shall not relieve the stationary source owner or operator of the responsibility to comply with other applicable portions of the District's Rules and Regulations.

(j) Severability:

If any portion of this Rule shall be found to be unenforceable, such finding shall have no effect on the enforceability of the remaining portions of the Rule, which shall continue to be in full force and effect.

RULE 213.1. Standards for Permits to Operate: Air Quality Impact

(a) Requirement for Permit to Construct as Condition for Permit to Operate:

The Air Pollution Control Officer shall deny a permit to operate for any stationary source subject to the requirements of Rule 213 unless the applicant has obtained a permit to construct.

(b) Air Quality Impact Analysis for Sources Emitting Larger Quantities of Air Contaminants Than Assumed in the Analysis Performed Pursuant to Rule 213:

The Air Pollution Control Officer shall not grant a permit to operate to any stationary source that he determines emits quantities of air contaminants larger than were assumed in the analysis performed for the permit to construct for the source, unless the Air Pollution Control Officer performs the air quality impact analysis required by Rule 213 and determines that the actual emissions from the source will not cause a violation of, or will not interfere with the attainment or maintenance of, any state or national ambient air quality standard.

(c) Permit Conditions:

The Air Pollution Control Officer shall condition the issuance of a permit to operate, on such terms as are deemed necessary to ensure that the stationary source will be operated in the manner assumed in making the analysis required by Rule 213 or subsection (b)

RULE 213.1. Standards for Permits to Operate: Air Quality Impact

(a) Requirement for Permit to Construct as Condition for Permit to Operate:

The Air Pollution Control Officer shall deny a permit to operate for any stationary source subject to the requirements of Rule 213 unless the applicant has obtained a permit to construct.

(b) Air Quality Impact Analysis for Sources Emitting Larger Quantities of Air Contaminants Than Assumed in the Analysis Performed Pursuant to Rule 213:

The Air Pollution Control Officer shall not grant a permit to operate to any stationary source that he determines emits quantities of air contaminants larger than were assumed in the analysis performed for the permit to construct for the source, unless the Air Pollution Control Officer performs the air quality impact analysis required by Rule 213 and determines that the actual emissions from the source will not cause a violation of, or will not interfere with the attainment or maintenance of, any state or national ambient air quality standard.

(c) Permit Conditions:

The Air Pollution Control Officer shall condition the issuance of a permit to operate, on such terms as are deemed necessary to ensure that the stationary source will be operated in the manner assumed in making the analysis required by Rule 213 or subsection (b)

of this Rule, whichever is applicable. Where appropriate, such conditions shall prohibit a new stationary source which is a replacement for an existing stationary source from operating, unless the operation of the existing source is terminated. The Air Pollution Control Officer may allow a maximum of 90 days as a start-up period for simultaneous operation of the existing stationary source or replaced portion thereof, and the new stationary source or replacement portions thereof.

(d) Exemptions:

The Air Pollution Control Officer shall exempt from the provisions of this Rule, any stationary source which:

1. Has received a permit to construct prior to the adoption of Rule 213.
2. Is a continuing operation, without modification, of a stationary source that was previously exempt from the permit provisions of these Rules and Regulations and a permit to operate is required solely because of a change in permit exemptions stated in Rule 219.

(e) Severability:

If any portion of this Rule shall be found to be unenforceable, such finding shall have no effect on the enforceability of the remaining portions of the Rule, which shall continue to be in full force and effect.

RULE 213.2. Definitions for Rules 213 and 213.1

- (a) STATIONARY SOURCE means a unit or an aggregation of units of non-vehicular air-contaminant-emitting equipment which is located on one property or on contiguous properties; which is under the same ownership or entitlement to use and operate; and, in the case of an aggregation of units, those units which are related to one another. Units shall be deemed related to one another if the operation of one is dependent upon, or affects the operation of, the other; if their operation involves a common or similar raw material, product, or function; or if they have the same first three digits in their standard industrial classification codes as determined from the Standard Industrial Classification Manual published in 1972 by the Executive Office of the President, Office of Management and Budget.

In addition, in cases where all or part of a stationary source is a facility used to load cargo onto or unload cargo from cargo carriers, other than motor vehicles, the Air Pollution Control Officer shall consider such carriers to be parts of the stationary source. Accordingly, all emissions from such carriers (excluding motor vehicles) which will result in an adverse impact on air quality in the State of California shall be considered as emissions from such stationary source. Emissions from such carriers shall include those that result from the operation of the carriers' engines; the purging or other method of venting of vapors; and from the loading, unloading, storage, processing, and transfer of cargo.

RULE 213.2. Definitions for Rules 213 and 213.1

- (a) STATIONARY SOURCE means a unit or an aggregation of units of non-vehicular air-contaminant-emitting equipment which is located on one property or on contiguous properties; which is under the same ownership or entitlement to use and operate; and, in the case of an aggregation of units, those units which are related to one another. Units shall be deemed related to one another if the operation of one is dependent upon, or affects the operation of, the other; if their operation involves a common or similar raw material, product, or function; or if they have the same first three digits in their standard industrial classification codes as determined from the Standard Industrial Classification Manual published in 1972 by the Executive Office of the President, Office of Management and Budget.

In addition, in cases where all or part of a stationary source is a facility used to load cargo onto or unload cargo from cargo carriers, other than motor vehicles, the Air Pollution Control Officer shall consider such carriers to be parts of the stationary source. Accordingly, all emissions from such carriers (excluding motor vehicles) which will result in an adverse impact on air quality in the State of California shall be considered as emissions from such stationary source. Emissions from such carriers shall include those that result from the operation of the carriers' engines; the purging or other method of venting of vapors; and from the loading, unloading, storage, processing, and transfer of cargo.

- (b) MODIFICATION means any physical change in, or any change in the method of operation of, a stationary source.

For the purposes of this definition:

1. Routine maintenance or repair shall not be considered to be physical changes, and
2. An increase in production rate or operating hours shall not be considered to be a change in the method of operation, provided that these increases are not contrary to any existing permit to operate conditions.

- (c) BEST AVAILABLE CONTROL TECHNOLOGY means the maximum degree of emission control for any air contaminant emitting equipment, taking into account technology which is known but not necessarily in use, provided that the Air Pollution Control Officer shall not interpret best available control technology to include a requirement which will result in the closing and elimination of or inability to construct a lawful business which could be operated with the application of the best control technology currently in use.

- (d) Severability:

If any portion of this Rule shall be found to be unenforceable, such finding shall have no effect on the enforceability of the remaining portions of the Rule, which shall continue to be in full force and effect.



State of California  
AIR RESOURCES BOARD

November 24, 1976

Resolution 76-40

WHEREAS, pursuant to Section 110 of the Federal Clean Air Act and §§ 39601 and 40001 of the California Health and Safety Code the Air Resources Board is the state agency charged with the responsibility of preparing and directing the implementation of an Air Pollution Emergency Plan;

WHEREAS, the Air Resources Board, by direction of the Governor in Executive Order No. B-6-75 and pursuant to Administrative Order No. 75-2, issued jointly by the Air Resources Board and the Office of Emergency Services, has adopted the California Air Pollution Emergency Plan;

WHEREAS, the Air Resources Board has evaluated recommendations of the Department of Health and determined that revisions to the episode stage criteria are required;

WHEREAS, the Air Resources Board has identified revisions to the abatement actions for the aforesaid episodes, which are necessary and reasonable;

WHEREAS, the Air Resources Board has complied with all public hearing and notice requirements of state and federal law;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board does hereby adopt the Air Pollution Emergency Plan, as revised November 24, 1976.

AMENDMENT TO THE AIR POLLUTION EMERGENCY PLAN  
New Language Adopted November 24, 1976

5. Oxidant in Combination with Sulfur Dioxide

a. Stage 1

*The following general actions shall be taken in the affected area upon the declaration of this stage:*

- (1) Issue health warnings, in accordance with Appendix B-1, to sensitive persons in receptor areas.*
- (2) Advise schools that strenuous activities by students must be discontinued.*
- (3) Notify officials, news media and organizations listed in Section VII. A.3.*
- (4) Abatement Actions*

*Take all abatement actions required in the Plan for Stage 1 oxidant episodes and for Stage 1 sulfur dioxide episodes.*

b. Stage 2

*The following general actions, in addition to the actions taken at Stage 1, shall be taken in the affected area upon the declaration of this stage:*

- (1) Issue health warning, in accordance with Appendix B-1, to sensitive persons and those displaying reaction symptoms.*
- (2) Suspend programs which involve physical exertion by participants using public parks or public recreational facilities. Such programs which are for adult participants in scheduled athletic events with paid attendance are excepted.*
- (3) Administrative Actions*
  - (a) Notify officials, news media and organizations listed in Section VII. A.3.*
  - (b) Meteorological and air quality data shall be continuously monitored and evaluated until the episode is terminated.*
  - (c) Upon notification by an APCD in the affected area that the pollutant concentration has reached Stage 2, the Executive Officer of the ARB shall activate the ARB emergency action staff and notify OES.*

- (d) If an APCD administers this program, the ARB shall be informed at each third increment of the concentration difference between Stages 2 and 3.

(4) Abatement Actions

Take all abatement actions required in the Plan for Stage 2 oxidant episodes and for Stage 2 sulfur dioxide episodes.

c. Stage 3

The following general actions, in addition to the actions taken at Stage 1 and Stage 2, shall be taken in the affected area upon the declaration of this stage:

- (1) Warnings shall be issued describing protective measures to be taken in accordance with Appendix B-1, including identification of population groups most subject to harm and identification of the type of facilities where persons may be least subjected to exposure.

(2) Administrative Actions

- (a) Notify officials, news media, and organizations listed in Section VII. A.3.
- (b) The OES and the ARB shall evaluate actions that have been taken and jointly advise the Governor of the conditions.
- (c) Implement the source inspection plans. In the absence of APCD source inspection plans which have been approved by the ARB, the ARB shall be responsible for assuring that specified sources are inspected during an episode.

(3) Abatement Actions

Take all abatement actions required in the Plan for Stage 3 oxidant episode and for Stage 3 sulfur dioxide episodes.

State of California  
AIR RESOURCES BOARD

Resolution 76-41

December 14, 1976

WHEREAS, Section 39601 of the Health and Safety Code authorizes the Air Resources Board to adopt standards, rules and regulations necessary for the proper execution of the powers and duties granted to and imposed on the Board by law; and

WHEREAS, Section 41800 of the Health and Safety Code prohibits the use of open outdoor fires for the purpose of disposal or burning of petroleum wastes, demolition debris, tires, tar, trees, wood waste, or other combustible or flammable solid or liquid waste, or for metal salvage or burning of motor vehicle bodies after December 31, 1971; and

WHEREAS, Section 41808 of the Health and Safety Code authorizes the Air Resources Board to permit a city or county to use open outdoor fires, for a limited time only, in its operation of a solid waste dump, upon the finding that because of sparse population in the geographical area and economic and technical difficulties, the solid waste dump should be so operated; and

WHEREAS, the Board's current guidelines and procedure for the operation of open burning dumps by cities and counties, which expire December 31, 1976, need to be continued in order to provide for limited extensions for open burning dumps in areas which meet certain conditions; and

WHEREAS, the Board has identified the need to amend the aforesaid guidelines and procedures to specify the information necessary for its consideration of an extension and to set forth its current policy for review of extension requests; and

WHEREAS, Section 39515 of the Health and Safety Code empowers the Air Resources Board to delegate to the Executive Officer such duties as the Board deems appropriate;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board hereby sets forth its requirements for receiving applications for limited time extensions from cities and counties to continue to use open fires for the purpose of disposal of solid waste at existing open burning dumps, as follows:

Any city or county which desires to continue to use open fires for the disposal of solid waste shall apply to the Board for such permission. The application shall be in

the form of a resolution from the City Council or County Board of Supervisors, and shall be accompanied with information showing:

- 1) The geographical location of each open burning dump and population density within a 20 mile radius.
- 2) The number of people and area that each open burning dump serves.
- 3) The amount of waste disposed of at each open burning dump, reported in tons per year.
- 4) The distance to the nearest land fill and/or transfer station from the service area.
- 5) A specific plan and timetable for phase-out of the open burning dump.
- 6) A specific plan which requires disposal of tires and petroleum products other than by burning at the open dump site.
- 7) The unavailability of house-to-house waste collection service.
- 8) The unavailability of other reasonable alternative methods of disposal.

BE IT FURTHER RESOLVED, that the Air Resources Board's policy for approving requests for limited time extensions to cities and counties to continue to use open fires for the purpose of disposal of solid waste shall be as follows:

- 1) A limited time extension may be granted for up to six months for dumps located in an "extremely sparsely populated area," which is defined as an area where the population density is less than four persons per square mile within a 20 mile radius, provided all the information specified above is submitted with the request. Acceptable interim progress reports will be required at three month intervals during the extension time. Additional time extensions of six months' duration for a dump site may be authorized, based upon the evaluation of information provided by the applicants. Approval for each additional six month extension shall be based upon demonstrable and satisfactory progress made in phasing out the use of the open burning dump.

- 2) For the granting of an extension of time to a dump not within an "extremely sparsely populated area," a city or county shall also submit with its application a detailed justification for the requested extension which demonstrates that the benefit of continued burning to the surrounding community outweighs the detriment to air quality.
- 3) The disposal of tires and petroleum products by open fires will not be allowed.

BE IT FURTHER RESOLVED, that the authority to grant or deny requests from cities and counties for extension of open burning operations at dump sites, based on the guidelines set forth in this Resolution, is hereby delegated to the Executive Officer.

BE IT FURTHER RESOLVED, that noncompliance with any of the guidelines set forth in this Resolution shall constitute immediate cause for termination of any time extension granted to a city or county.

BE IT FURTHER RESOLVED, that Resolution 74-5 is hereby rescinded.

State of California  
AIR RESOURCES BOARD

Resolution 76-42

December 14, 1976

WHEREAS, Section 39601 of the Health and Safety Code authorizes the Air Resources Board to adopt standards, rules and regulations necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law; and

WHEREAS, Section 41856 of the Health and Safety Code directs the Air Resources Board to promulgate Guidelines for the regulation and control of agricultural burning for each of the air basins established by the State Board; and

WHEREAS, Section 41857 of the Health and Safety Code states that the Guidelines promulgated by the Board shall be based on meteorological data, the nature and volume of materials to be burned, and the probable effect of such burning on the ambient air quality within the air basins affected; and

WHEREAS, Agricultural Burning Guidelines have previously been promulgated in accordance with the provisions in the Health and Safety Code; and

WHEREAS, Section 41859 states that the Board shall continuously review the Guidelines and may modify, repeal or alter such Guidelines if scientific and technological data indicate that such changes are warranted. Before adopting any such changes, the State Board shall hold a public hearing and shall consider the criteria set forth in Section 41857; and

WHEREAS, the statutory references in the Guidelines must be re-numbered to conform with the recodification of the California Air Pollution Control Laws (Chapter 957, Statutes of 1975); and

WHEREAS, the Guidelines need revision to reflect a change in the number of air basins established by the Board; and

WHEREAS, the definition of "agricultural burning" in Section 39011 of the Health and Safety Code has been amended by AB 2931 (Chapter 1216, Statutes of 1976); and

WHEREAS, scientific data has indicated that permissive-burn and no-burn day forecasts can be made the previous day and the Guidelines should reflect that the Board now issues such notices the previous day; and

WHEREAS, Guidelines must be established to implement the provisions of AB 2931 (Chapter 1216, Statutes of 1976) which allow open burning of cotton gin waste; and

WHEREAS, in the development of the proposed revisions to the Guidelines, the Enforcement Branch staff of the Air Resources Board has consulted with representatives of various air pollution control agencies, the University of California Agricultural Engineering Extension, the California Cotton Ginners Association, the Statewide Air Pollution Research Center at the University of California at Riverside, the Department of Food and Agriculture and other agricultural agencies and associations; and

WHEREAS, a public workshop was held in Fresno on November 8, 1976 to obtain public comment on the proposed amendments to the Guidelines; and

WHEREAS, notice of a public hearing to consider the proposed revisions and amendments to the Guidelines has been given and a public hearing held in accordance with the provisions of the Administrative Procedure Act (Government Code, Title 2, Division 3, Part 1, Chapter 4.5);

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board repeals Subchapter 2 of Chapter 1, Part III of Title 17 of the California Administrative Code and adopts the proposed Subchapter 2 of Chapter 1, Part III of Title 17 of the California Administrative Code attached hereto.

Attachment



AIR RESOURCES BOARD

State of California

PROPOSED AGRICULTURAL BURNING GUIDELINES

Subchapter 2. Agricultural Burning Guidelines

*Note: Authority cited for Subchapter 2:  
Health and Safety Code §§ 41850, 41856, 41859.*

Article 1. General Provisions

80100. Definitions. (a) "Agricultural Burning" means open outdoor fires used in agricultural operations in the growing of crops or raising of fowls or animals, or open outdoor fires used in forest management, or range improvement, or used-in the improvement of land for wildlife and game habitat, or disease or pest prevention. In addition "agricultural burning" includes open outdoor fires used in burning solid waste which is produced from the ginning of cotton. This section shall remain in effect only until January 1, 1979 and as of that date is repealed. ~~(Section 39295.6 of the California Health and Safety Code).~~

(a) "Agricultural Burning" means open outdoor fires used in agricultural operations in the growing of crops or raising of fowl or animals, or open outdoor fires used in forest management, range improvement, or the improvement of land for wildlife and game habitat, or disease or pest prevention. This section shall become operative on January 1, 1979.

(b) "Open burning in agricultural operations in the growing of crops or raising of fowls or animals" means:

(1) The burning in the open of materials produced wholly from operations in the growing and harvesting of crops or raising of fowls or animals for the primary purpose of making a profit, of providing a livelihood, or of conducting agricultural research or instruction by an educational institution; and

(2) In connection with operations qualifying under Subdivision (1):

(A) The burning of grass and weeds in or adjacent to fields in cultivation or being prepared for cultivation; and

(B) The burning of material not produced wholly from such operations, but which are intimately related to the growing or harvesting of crops and which are used in the field, except as prohibited by district regulations. Examples are trays for drying raisins, date palm protection paper, and fertilizer and pesticide sacks or containers, where the sacks or containers are emptied in the field.

(c) "Range improvement burning" means the use of open fires to remove vegetation for a wildlife, game or livestock habitat or for the initial establishment of an agricultural practice on previously uncultivated land.

(d) "Forest management burning" means the use of open fires, as part of a forest management practice, to remove forest debris. Forest management practices include timber operations, silvicultural practices or forest protection practices.

(e) "Brush treated" means that the material to be burned has been felled, crushed or uprooted with mechanical equipment, or has been desiccated with herbicides.

(f) "Timber operations" means cutting or removal of timber or other forest vegetation.

(g) "*Silviculture*" means the establishment, development, care and reproduction of stands of timber.

(h) "*State Board*" means the State Air Resources Board, or any person authorized to act on its behalf.

(i) "Designated agency" means any agency designated by the *State Board* as having authority to issue agricultural burning permits. The U.S. Forest Service and the California Division of Forestry are so designated within their respective areas of jurisdiction.

(j) A "no-burn" day means any day on which agricultural burning is prohibited by the *State Board*.

(k) A "permissive-burn" day means any day on which agricultural burning is not prohibited by the *State Board*.

(l) "District" means each county air pollution control district, regional air pollution control district, unified air pollution control district, *South Coast Air Quality Management District*, or the Bay Area Air Pollution Control District.

(m) "Tahoe Basin" means that area, within the State of California, as defined by the California-Nevada Interstate Compact, Article II, Paragraph C, as contained in Section 5976 of the State Water Code.

(n) "Cotton Gin Waste" means solid waste which is produced from the ginning of cotton.

Note: Authority Cited: Health and Safety Code § 39011.

80101. Scope and Policy. (a) The guidelines shall not supersede any rule or regulation of any district whose rule or regulation has been in effect for five or more years prior to September 19, 1970. {Section 39295-7 of the California Health and Safety Code}.

(b) Although any local or regional authority may establish stricter standards for the control and the regulation of agricultural burning than those set forth in the Guidelines, no local or regional authority may ban any agricultural burning. {Section 39057 of the California Health and Safety Code}.

(c) The Agricultural Burning Guidelines were developed after considering meteorological data, the nature and volume of materials to be burned, the probable effect of agricultural burning on ambient air quality, on agricultural production, and on range and forest management within the air basins. {Section 39298-3 and 39298-4 of the California Health and Safety Code}.

(d) The Guidelines are not intended to permit open burning on days when such open burning is prohibited by public fire protection agencies for purposes of fire control or prevention.

Note: Authority Cited: Health and Safety Code §§ 41864, 41857, 41858 and 41854.

80102. Exceptions. (a) Open burning in agricultural operations in the growing of crops or raising of fowls or animals or disease or pest prevention, at altitudes above 3,000 feet mean sea level (msl), except in the Tahoe Basin, is exempt from these Agricultural Burning Guidelines.

(b) Agricultural burning in areas at altitudes above 6,000 feet (msl), with the exception of in the Tahoe Basin, is exempt from these Agricultural Burning Guidelines.

80110. Permissive-Burn or No-Burn Days. (a) Commencing no later than ~~December-20,-1972~~ December 1, 1974, a notice as to whether a the following day is a permissive-burn day or, a no-burn day ~~will-be-provided-by-the-Board-each-morning-by-0745-for-each-of-the-eleven-air-basins-~~, or whether the decision will be announced the following day, will be provided by the State Board at 1500 daily for each of the air basins. If the decision is made the following day it will be announced by 0745. Such notices will be based on the Meteorological Criteria for Regulating Agricultural Burning, which were adopted by the State Board on June 21, 1972, and which ~~may-be-amended-from-time-to-time-after-public-hearing-~~ were amended on February 20, 1975 and may be further amended from time to time after public hearing. Interested persons shall be notified 30 days in advance of the hearing.

~~(b)--An-advisory-outlook-which-estimates-whether-the-following-day(s)-will-be-a-permissive-burn-or-no-burn-day(s)-will-be-made-~~

~~(c)~~(b) Agricultural burning is prohibited on no-burn days, except as specified in Section 80102, in subdivisions

(d) ~~and~~, (e) and (f) of Section 80120, and as may be permitted by a provision in an implementation plan adopted pursuant to Section 80150(c)(5).

~~(d)~~ (e) Upon request from a permittee through a designated agency, seven days in advance of a specific range improvement burn, or forest management burn, at any elevation below 6,000 feet (msl), ~~or of a specific forest management burn at elevations between 3,000 to 6,000 feet (msl)~~, a permissive-burn or no-burn notice will be issued by the State Board up to 48 hours prior to the date scheduled for the burn. Without further request, a daily notice will continue to be issued until a permissive-burn notice is issued.

~~(e)~~ (d) Notwithstanding subdivision ~~(d)~~ (e) of Section 80110, the State Board may cancel permissive-burn notices that ~~had~~ have been issued more than 24-hours in advance if the cancellation is necessary to maintain suitable air quality.

~~(f)~~ (e) A permissive-burn or no-burn advisory outlook will be available up to 72-hours in advance of burns specified in ~~S~~subdivision ~~(d)~~ (e) of Section 80110.

Note: Authority Cited: Health and Safety Code 841855.

80120. Burning Permits. (a) The forms of burning permits shall be jointly prepared by the districts and the designated agencies.

(b) The form of the permit shall contain the following words or words of similar import: "This permit is valid only on those days during which agricultural burning is ~~are~~ not prohibited by the State Air Resources Board pursuant to Section ~~39298~~ 41855 of the Health and Safety Code."

(c) Each district shall provide the designated agencies within the district with information on state laws, district rules and regulations, these Agricultural Burning Guidelines and other information as appropriate.

(d) A district may, by special permit, authorize agricultural burning on days designated by the Board as no-burn days because the denial of such permit would threaten imminent and substantial economic loss.

(e) Each district may designate a period between January 1 and May 31, during which time range improvement burning may be conducted by permit on a no-burn day, providing that more than 50 percent of the land has been brush treated.

*(f) Each district may designate a period between February 1 and June 30 inclusive, during which time cotton gin waste burning may be conducted by permit in accordance with Section 80180 (b) of these Guidelines. The burning shall be commenced only on permissive burn days but will be allowed to continue to burn should any subsequent days be no-burn days.*

~~(f)~~(g) Notwithstanding the provisions in subdivision (e) and (f) of this Section, the State Board may prohibit range improvement or cotton gin waste burning during the period designated by the district if, in the opinion of the State Board, such prohibition is required for the maintenance of suitable air quality.

~~(g)~~(h) Permits issued by designated agencies shall be subject to these Agricultural Burning Guidelines and to the rules and regulations of the district.

(h) (i) Each applicant for a permit shall provide information required by the designated agency for fire protection purposes.

(i) (j) Each applicant for a permit shall provide information requested by the district.

(j) (k) No person shall knowingly set or permit agricultural burning unless he has a valid permit from a designated agency. A violation of this subdivision is a violation of Section ~~39299~~ 41852 of the California Health and Safety Code.

*Note: Authority Cited: Heath and Safety Code §§ 41854, 41862 and 41852.*

80130. Burning Report. (a) A report of burning pursuant to these Guidelines during each quarter of a calendar year shall be submitted to the *State Board* by the district within 20 days of the end of the quarter. The report shall include the date of each burn, the type of waste burned, and the estimated tonnage or acreage of waste burned. In the future if in the judgment of the *State Board*, quarterly reports are no longer necessary, the *State Board* may require reports at less frequent intervals.

(b) A report of permits issued pursuant to subdivision (d) of Section 80120 during each quarter of a calendar year shall be submitted to the *State Board* within 20 days after the end of the quarter. The report shall include the number of such permits issued, the date of issuance of each permit, the person or persons to whom the permit was issued, an estimate of the amount of wastes burned pursuant to the



permit, and a summary of the reasons why denial of such permits would have threatened imminent and substantial economic loss. In the future if in the judgment of the State Board, quarterly reports are no longer necessary, the State Board may require reports at less frequent intervals.

*Note: Authority Cited: Health and Safety Code § 41862*

## Article 2. Implementation Plan

80140. General. (a) In accordance with Section ~~39298-8~~ 41863 of the California Health and Safety Code, each district in the State shall adopt by ~~December 20, 1972~~ an implementation plan consistent with these Agricultural Burning Guidelines. Each district shall develop its implementation plan in cooperation with the appropriate fire protection agencies having jurisdiction within the ~~D~~district.

(b) Districts that have an approved implementation plan for regulating "agricultural burning" ~~open burning of "agricultural waste"~~ (as defined in the Agricultural Burning Guidelines adopted on ~~March 17, 1971~~ June 21, 1972, filed as Administrative Code regulations with the Secretary of State on ~~March 25, 1971~~ July 7, 1972) need not submit an implementation plan for regulating open burning in agricultural operations in the growing of crops or raising of fowls or animals, forest management, or range improvement, or used in improvement of land for wildlife and game habitat as defined in these guidelines. Such approved implementation plans shall remain effective under this subdivision until modified and approved pursuant to Ssubdivision (i) of this Ssection. Districts shall submit modifications to their implementation plans by March 1, 1977,

to include provisions for regulating agricultural burning for disease and pest prevention.

(c) The form of permit(s) required under Ssubdivision (a) of Section 80120 and the form of information required under Ssubdivision (c) of the Section 80120 shall be part of the plan.

(d) Each plan shall specify enforcement procedures.

(e) Each plan shall be submitted to the State Board for approval within ten days after adoption by the District.

(f) After public-hearings, tThe State Board shall either approve, modify and approve, or reject the any plan or modification of such plan submitted. Prior to disapproval or modification of any such plan the State Board shall hold a public hearing. Approval of any plan or any part of such plan is hereby delegated to the Executive Officer of the State Board.

(g) If the plan or modification of such plan is rejected, or if no timely plan is submitted, or if the plan is economically or technically not feasible, the State Board, after a public hearings held in the basin affected, shall adopt an alternative plan.

(h) The approved implementation plan shall be enforced by the district.

(i) After a district implementation plan is approved by the State Board, modifications to the plan shall be submitted to the State Board for its approval, and shall not be effective until approved.

Note: Authority Cited: Health and Safety Code § 41863.

80150. Open Burning in Agricultural Operations in the Growing of Crops or Raising of Fowls or Animals. (a) A District with no agricultural operations in the growing of crops or raising of fowls or animals within its jurisdiction may request to be exempted from the requirements of this section

(b) Where an implementation plan for open burning in agricultural operations in the growing of crops or raising of fowls or animals is required, the plan shall include rules and regulations which:

(1) Require the material to be burned to be free of material that is not produced in an agricultural operation;

(2) Require the material to be arranged so that it will burn with a minimum of smoke;

(3) Require material to be reasonably free of dirt, soil and visible surface moisture;

(4) Require the material to be dried for minimum periods to be specified in the implementation plan, with separate specifications for the following: (1) trees and large branches, (2) prunings and small branches, (3) wastes from field crops that are cut in a green condition, and (4) other materials; and

(5) Regulate the total amount of material that may be burned each day.

(c) In developing the rules and regulations each district shall consider additional provisions with respect to the following:

(1) Hours of burning;

(2) No-burning season or seasons;

(3) Regulateing burning when the wind direction is toward a nearby populated area;

(4) Limiting the ignition of fires to approved ignition devices;

(5) Permitting on no-burn days the burning of empty sacks or containers which contained pesticides or other toxic substances, providing the sacks or containers are within the definition of "open burning in agricultural operations in the growing of crops or raising of fowls or animals", as specified in Section 80100(b)(2)(B).

*Note: Authority Cited: Health and Safety Code § 41863.*

80160. Range Improvement Burning. (a) A district with no range improvement burning within its jurisdiction may request to be exempted from the requirements of this section.

(b) Where an implementation plan for range improvement burning is required, the plan shall include rules and regulations which:

(1) Limit the ignition of fires to approved ignition devices;

(2) Regulate the total amount of waste that may be burned each day;

(3) Require the burn to be ignited as rapidly as practicable within applicable fire control restrictions;

(4) Regulate burning when the wind direction is toward a nearby populated area;

(5) Require brush to be treated at least six months prior to the burn if economically and technically feasible;

(6) Require unwanted trees over six inches in diameter to be felled and dried prior to the burn. The

minimum drying period shall be specified in the implementation plan;

(7) Specify the period, if any, in accordance with Ssubdivision (e) of Section 80120; and

(8) If the burn is to be done primarily for improvement of land for wildlife and game habitat, require the permit applicant to file with the district a statement from the Department of Fish and Game certifying that the burn is desirable and proper.

*Note: Authority Cited: Health and Safety Code §§ 41863 and 41861.*

30170. Forest Management Burning. (a) A district with no forest management burning within its jurisdiction may request to be exempted from the requirements of this section.

(b) Where an implementation plan for forest management burning is required, the plan shall include rules and regulations which:

(1) Limit the ignition of fires to approved ignition devices;

(2) Regulate the total amount of waste that may be burned each day;

(3) Require the waste to be ignited as rapidly as practicable within applicable fire control restrictions;

(4) Regulate burning when the wind direction is toward a nearby populated area;

(5) Require the waste to be dried for minimum periods to be specified by the designated agency;

(6) Require the waste to be free of tires, rubbish, tar paper or construction debris;

(7) Require the waste to be burned, to be windrowed or piled where possible, unless good silvicultural practice dictates otherwise;

(8) Require the piled waste to be prepared so that it will burn with a minimum of smoke; and

(9) Require the piled waste to be reasonably free of dirt and soil.

*Note: Authority Cited: Health and Safety Code § 41863.*

*80180. Cotton Gin Waste Burning. (This section will expire on January 1, 1979.)*

*(a) A District with no cotton ginning within its jurisdiction is exempt from the requirements of this section.*

*(b) Where an implementation plan for cotton gin waste burning is required, the plan shall include rules and regulations which:*

*(1) Require that burning be commenced only between 10 a.m. and 12 noon on a permissive burn day only during the months of February through June, inclusive;*

*(2) Require that the material to be burned be arranged in such a way as to minimize surface area of the cotton gin waste burned;*

*(3) Require that dry straw be spread uniformly over the surface of the pile to provide uniform ignition and rapid formation of a surface ash covering to promote smoke filtering. The straw shall be ignited on the downwind edge of the pile;*

(4) Require that after formation of the surface ash within 24 hours after commencement of the burning, the surface of the pile shall be sprayed with water to stabilize the ash layer and set the surface to minimize blowing of ash;

(5) Require that burning not be commenced when visibility in the District is less than 10 miles (when the relative humidity is less than 70 percent) or when surface moisture is present on the cotton gin waste;

(6) Require that burning of any cotton gin waste not be permitted within a 1 mile radius of any area having a population density of more than 200 persons per square mile;

(7) Regulate the total amount of material that may be ignited in each day. The plan shall take into consideration that burning will be commenced on a permissive burn day but will probably extend for several days;

(8) Require that burn permits for burning of cotton gin waste be issued by the local air pollution control officer;

(9) Require that in addition to obtaining a permit for burning cotton gin waste from the air pollution control officer, the applicant obtain an agricultural burning permit from the permit issuing agency having jurisdiction in the area where the burn is to take place.

(10) Require the applicant for a cotton gin waste burn permit to:

i) Pay the required fee pursuant to Section 41853.5 of the Health and Safety Code for the waste

created from the total number of bales ginned at the applicant's gin for the entire season(s), or

ii) Provide substantiation to the satisfaction of the air pollution control officer that the waste represents a specific portion of the cotton ginned and pay the appropriate fee, and/or

iii) At the district's discretion allow the district to obtain and weigh 3 one cubic foot representative samples of the cotton gin waste to be burned and measure the pile(s) to determine the total volume of the waste in order to calculate the total weight of the waste. The applicant shall then pay the appropriate fee assuming 150 pounds of waste represents one bale of cotton ginned;

(11) Require that the permit from the air pollution control officer not allow open burning on days when such open burning is prohibited by public fire protection agencies for purposes of fire control or prevention;

(12) Require that the burn permit application for burning of cotton gin waste include the following information:

i) Name, owner and location of gin,

ii) Total number of bales of cotton ginned at the applicant's gin for each season or seasons,

iii) Total number of bales of cotton ginned that the waste to be burned represents,

iv) Substantiating documentation or test results and calculations performed by the district to justify any difference between items ii and iii above,



v) Total fee at 15¢ for each bale ginned that the waste represents or each 150 pounds of waste as calculated by the district,

vi) Maximum population density per square mile within a 1 mile radius of the burn site;

(13) Require that prior to burning, the applicant contact the district for information on visibility, verification of permissive burn day, notification of amount to be burned, and final approval by the air pollution control officer;

(14) Require that the burn permit fees collected be sent monthly to the Air Resources Board to be deposited in the Air Pollution Control Fund. These funds shall be continuously appropriated to the State Board to be used for the sole purpose of funding research for the development of a cotton gin trash incinerator heat exchanger or other device for the disposal of cotton gin waste consistent with emission standards set by the district board or State Board. Existing procedures for allocating the State Board's research funds will be used in determining how the funds are to be committed. The State Board will consult with the Solid Waste Management Board prior to awarding a contract for, or conducting, such research and development. If the State Board determines that such a device is available or that further expenditures for such purposes would not contribute meaningfully to their development, the fees will be utilized in accordance with the provisions of Section 43014 of the Health and Safety Code; and

(15) Require that each district send a check payable to the Air Resources Board, for the portion of

State of California  
AIR RESOURCES BOARD

Resolution 76-43

December 14, 1976

WHEREAS, Section 39601 of the Health and Safety Code authorizes the Air Resources Board to adopt standards, rules, and regulations necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law;

WHEREAS, Sections 43101 and 43104 of the Health and Safety Code authorize the Board to adopt vehicle emission standards and test procedures in order to control or eliminate air pollution caused by motor vehicles;

WHEREAS, the Board's certification procedures for new motor vehicles currently require a manufacturer to demonstrate that certification vehicle emissions will remain below the standards for at least 50,000 miles;

WHEREAS, recent data gathered by the Board and by the U. S. Environmental Protection Agency indicate that late model vehicles exceed on average the applicable emission standards long before 50,000 miles have been accumulated;

WHEREAS, these same data indicate that many vehicle owners are either not following the manufacturer's recommended maintenance practices or are disabling or defeating the exhaust emission control systems on their vehicles;

WHEREAS, the Board believes that vehicle manufacturers must take reasonable steps to ensure that their vehicles are not easily susceptible to maladjustment or tampering;

WHEREAS, the Board finds that regulations which minimize the susceptibility of emissions-related components to tampering and maladjustment are, commencing with the 1980 model-year for passenger cars and the 1981 model-year for light-duty trucks and medium-duty vehicles, technologically feasible and necessary to carry out the Legislature's mandate that the Board control and reduce air pollution caused by motor vehicles; and

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of the Administrative Procedure Act (Government Code, Title 2, Division 3, Part 1, Chapter 4.5);

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby amends its regulations in Section 1960(b), Article 2, Subchapter 1, Chapter 3 of Title 13, California Administrative Code as follows:

1960. Exhaust Emission Standards and Test Procedures - 1980 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.

- (b) The test procedures for determining compliance with these standards are set forth in "California Exhaust Emission Standards and Test Procedures for 1980 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles," adopted by the Air Resources Board November 23, 1976, amended December 14, 1976.

BE IT FURTHER RESOLVED, that the Board hereby adopts the "California Exhaust Emission Standards and Test Procedures for 1980 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles" dated November 23, 1976, amended December 14, 1976.

State of California  
AIR RESOURCES BOARD

Resolution 76-44

November 23, 1976

WHEREAS, Section 39601 of the Health and Safety Code authorizes the Air Resources Board to adopt standards, rules, and regulations necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law;

WHEREAS, Sections 43101 and 43104 of the Health and Safety Code authorize the Board to adopt vehicle emission standards in order to control or eliminate air pollution caused by motor vehicles;

WHEREAS, the Board has found that more stringent exhaust emission standards for passenger cars, light-duty trucks, and medium-duty vehicles are needed to achieve the ambient air quality standards in the South Coast Air Basin and in other areas of the State;

WHEREAS, on October 7 and 8, 1976 the Air Resources Board staff conducted a workshop with representatives of motor vehicle manufacturers to discuss the costs and technological feasibility of more stringent exhaust emission standards for passenger cars, light-duty trucks, and medium-duty vehicles, and to discuss needed changes to the Board's test procedures for such vehicles;

WHEREAS, based on information presented at the October 7 and 8 meetings and on information previously submitted to the Board and to the U.S. Environmental Protection Agency the Board has found that more stringent exhaust emission standards for passenger cars, light-duty trucks, and medium-duty vehicles are, commencing with the 1979 model-year, both technologically feasible and cost/effective;

WHEREAS, technical amendments to the Board's test procedures are necessary to clarify certain definitions, to amend the method for calculation of road load horsepower, and to establish the test requirements for four-wheel drive vehicles, all in conformance with proposed federal test procedures; and

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of the Administrative Procedure Act (Government Code, Title 2, Division 3, Part 1, Chapter 4.5);

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby amends its regulations in Article 2, Subchapter 1, Chapter 3 of Title 13, California Administrative Code as described in Exhibits I, II, III, and IV to Staff Report 76-22-2(a) dated November 23, 1976.

BE IT FURTHER RESOLVED, that the Board hereby adopts the "California Exhaust Emission Standards and Test Procedures for 1975 Through 1979 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles" dated February 19, 1975, as last amended November 23, 1976.

BE IT FURTHER RESOLVED, that the Board hereby adopts the "California Exhaust Emission Standards and Test Procedures for 1980 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles" dated November 23, 1976: Provided, that Subparagraphs (3)(f), (3)(g), and (5)(e) of said procedure shall not be in effect unless specifically adopted by the Board by resolution.

BE IT FURTHER RESOLVED, that the Board will consider that the adoption of the oxides of nitrogen standards proposed in the staff report 76-22-2(a) for 1982 and Subsequent model passenger cars, light duty trucks, and medium duty vehicles, at a continuation of today's public hearing which will be held in January, 1977.

Amendment to Section 1955.1  
Title 13, California Administrative Code

1955.1. Exhaust Emission Standards and Test Procedures-1975 Through ~~1978~~ 1979 Model-Year Passenger Cars.

- (a) The exhaust emissions from new 1975 through ~~1978~~ 1979 model-year gasoline-fueled passenger cars having an engine displacement of 50 cubic inches or greater, subject to registration and sold and registered in this state, shall not exceed:

Exhaust Emission Standards (grams per mile)			
<u>Model-Year</u>	<u>Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Oxides of Nitrogen (NO<sub>2</sub>)</u>
1975	0.9*	9.0	2.0
1976	0.9*	9.0	2.0
1977	0.41	9.0	1.5
1978	0.41	9.0	1.5
<u>1979</u>	<u>0.41</u>	<u>9.0</u>	<u>1.5</u>

\*Hydrocarbon emissions from limited-production passenger cars shall not exceed 1.5 grams per mile.

- (b) The test procedures for determining compliance with these standards are set forth in "California Exhaust Emission Standards and Test Procedures for 1975 through ~~1978~~ 1979 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles", adopted by the Air Resources Board February 19, 1975, as amended March 17, 1975, April 16, 1975, February 20, 1976, and March 31, 1976, and April 28, 1976, and November 23, 1976.

Amendment to Section 1955.5, Title 13,  
California Administrative Code

1955.5 Exhaust Emission Standards and Test Procedures - 1975 Through  
~~1978~~ 1979 Model-Year Light-Duty Trucks.

- (a) The exhaust emissions from new 1975 through ~~1978~~ 1979 model-year light-duty trucks having an engine displacement of 50 cubic inches or greater, subject to registration and sold and registered in this state, shall not exceed:

Exhaust Emission Standards  
(grams per mile)

<u>Model-Year</u>	<u>Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Oxides of Nitrogen (NO<sub>2</sub>)</u>
1975	2.0	20	2.0
1976	0.9	17	2.0
1977	0.9	17	2.0
1978	0.9	17	2.0
<u>1979</u>	<u>0.41 (0.50)*</u>	<u>9.0</u>	<u>1.5 (2.0)*</u>

\*Standards in parenthesis apply to light-duty trucks with equivalent inertia weights of 4000 lbs. or larger.

- (b) The standards shown in subdivision (a) for the 1975 model year shall apply to 1975 and 1976 model limited-production light-duty trucks.
- (c) The test procedures for determining compliance with these standards are set forth in "California Exhaust Emission Standards and Test Procedures for 1975 Through ~~1978~~ 1979 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles", adopted by the Air Resources Board February 19, 1975, as amended March 17, 1975, April 16, 1975, February 20, 1976, and March 31, 1976, and April 28, 1976, and November 23, 1976.

Amendment to Section 1959, Title 13,  
California Administrative Code

1959. Exhaust Emission Standards and Test Procedures - 1978 and  
1979 Model Medium-Duty Vehicles.

- (a) The exhaust emissions from new 1978 and 1979 medium-duty vehicles having an engine displacement of 50 cubic inches or greater, subject to registration and sold and registered in this state, shall not exceed:

Exhaust Emission Standards  
(grams per mile)

<u>Model-Year</u>	<u>Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Oxides of Nitrogen (NO<sub>2</sub>)</u>
1978	0.9	17	2.3
1979	0.9	17	2.3

- (b) The test procedures for determining compliance with these standards are set forth in "California Exhaust Emission Standards and Test Procedures for 1975 Through ~~1978~~ 1979 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles", adopted by the Air Resources Board February 19, 1975, as amended March 17, 1975, April 16, 1975, February 20, 1976, ~~and~~ March 31, 1976, ~~and~~ April 28, 1976, and November 23, 1976.



New Section 1960, Title 13,  
California Administrative Code

1960. Exhaust Emission Standards and Test Procedures - 1980 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.

- (a) The exhaust emissions from new 1980 and subsequent model passenger cars, light-duty trucks and medium-duty vehicles, subject to registration and sold and registered in this state, shall not exceed:

Exhaust Emission Standards  
(grams per mile)

<u>Model-Year</u>	<u>Vehicles</u>	<u>Equivalent Inertia Weight (lbs)</u>	<u>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Oxides of Nitrogen (NO<sub>2</sub>)</u>
1980	Passenger cars (PC)	All	0.41	9.0	1.0
	Light-Duty Trucks (LDT)	0-3999	0.41	9.0	1.5
	Light-Duty Trucks (LDT)	4000-5999	0.50	9.0	2.0
	Medium-Duty Vehicles (MDV)	All	0.9	17	2.3
1981 and subsequent	PC	All	0.41	9.0	1.0
	LDT and MDV	0-3999	0.41	9.0	1.0
	LDT and MDV	4000-5999	0.50	9.0	1.5
	MDV	6000 and larger	0.60	9.0	2.0

- (b) The test procedures for determining compliance with these standards are set forth in "California Exhaust Emission Standards and Test Procedures for 1980 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles," adopted by the Air Resources Board November 23, 1976.

CALIFORNIA EXHAUST EMISSION  
STANDARDS AND TEST PROCEDURES  
FOR 1980 AND SUBSEQUENT  
MODEL PASSENGER CARS, LIGHT-DUTY TRUCKS  
AND MEDIUM-DUTY VEHICLES

The provisions of Subparts A and B, Part 86, Title 40, Code of Federal Regulations, as they existed on November 23, 1976, are hereby adopted as the California Exhaust Emission Standards and Test Procedures for 1980 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles, with the following exceptions and additions:

1. Applicability

- a. These test procedures are applicable to 1980 and subsequent model passenger cars, light-duty trucks and medium-duty vehicles, except motorcycles. A manufacturer may elect to certify heavy-duty vehicles of 10,000 pounds maximum gross vehicle weight rating or less as medium-duty vehicles, in which event heavy-duty emission standards and test procedures will not apply. References to "light-duty trucks" in 40 CFR 86 shall apply both to "light-duty trucks" and "medium-duty vehicles" in these procedures.
- b. Any reference to vehicle sales throughout the United States shall mean vehicle sales in California.
- c. Regulations concerning EPA hearings, EPA inspections, specific language on the Certificate of Conformity, evaporative emissions, high-altitude vehicles and testing, and heavy-duty engines and vehicles shall not be applicable to these procedures, except where specifically noted.

2. Definitions

- a. "Administrator" means the Executive Officer of the Air Resources Board.
- b. "Certificate of Conformity" means Executive Order certifying vehicles for sale in California.
- c. "Certification" means certification as defined in Section 39018 of the Health and Safety Code.
- d. "Passenger car" means any motor vehicle designed primarily for transportation of persons and having a capacity of twelve persons or less.
- e. "Heavy-duty engine" means an engine which is used to propel a heavy-duty vehicle.
- f. "Heavy-duty vehicle" means any motor vehicle having a manufacturer's gross vehicle weight rating greater than 6,000 pounds, except passenger cars.

- g. "Light-duty truck" means any motor vehicle, rated at 6,000 pounds gross vehicle weight or less, which is designed primarily for purposes of transportation of property or is a derivative of such a vehicle, or is available with special features enabling off-street or off-highway operation and use.
- h. "Medium-duty vehicle" means any heavy-duty vehicle having a manufacturer's gross vehicle weight rating of 8500 pounds or less.
- i. "Incomplete truck" means any truck which does not have the primary load carrying device or container attached.
- j. "Vehicle curb weight" means, for incomplete trucks, 75% of the GVW rating or any higher vehicle curb weight specified by the manufacturer.
- k. "Basic vehicle frontal area" means the area enclosed by the geometric projection of the basic vehicle along the longitudinal axis, which includes tires but excludes mirrors and air deflectors, onto a plane perpendicular to the longitudinal axis of the vehicle.
- l. "Van" means a light-duty truck or medium-duty vehicle having an integral enclosure, fully enclosing the driver compartment and load carrying device, and having no body sections protruding more than 30 inches ahead of the leading edge of the windshield.

### 3. Test Procedures

Subparagraphs (3)(f) and (3)(g) below do not apply to 1980 model light-duty trucks and medium-duty vehicles.

- a. Hydrocarbon emissions shall be measured with an analytical system which responds only to the non-methane fraction.

In the alternative, a manufacturer may correct the total measured hydrocarbons with a methane content correction factor. This factor shall be 0.89 for gasoline-fueled passenger cars equipped with an oxidation catalyst, and 1.00 for all other vehicles. If any manufacturer has reason to believe that the above methane content correction factors are not appropriate for his exhaust emission control system, he may present evidence to the Executive Officer to support this claim. After examining the manufacturer's data, the Executive Officer may designate a methane content correction factor different than those stated above.

All hydrocarbon test data shall be reported as non-methane hydrocarbons (NMHC).

- b. Mileage will be accumulated on four wheel drive vehicles in their normal on-highway mode of operation. For emissions testing, four wheel drive vehicles will be tested in a two wheel drive mode of operation. Full time four wheel drive vehicles will have the front drive wheels temporarily disengaged by the vehicle manufacturer. Four wheel drive vehicles which can be manually shifted to a two wheel drive mode will be tested in the normal on-highway two wheel drive mode of operation.

- c. Durability data submitted pursuant to subparagraph 86.077-24(f) may be from vehicles previously certified by EPA or ARB.
- d. The requirements in subparagraph 86.078-28(a)(4)(i)(B) (durability vehicles must meet emission standards) refer to Federal emission standards.
- e. For all light-duty trucks and medium-duty vehicles, except vans, and for heavy-duty vehicles optionally certified as medium-duty vehicles, the road load power (horsepower) at 50 mph shall be 0.58 times "A", rounded to the nearest 0.5 horsepower. For vans, the road load power (horsepower) shall be 0.50 times "A", rounded to the nearest 0.5 horsepower. "A" is the basic vehicle frontal area (ft<sup>2</sup>) plus the additional frontal area (ft<sup>2</sup>) of mirrors and optional equipment exceeding 0.1 square feet and which are sold on more than 33% of the car line.

Where it is expected that more than 33% of the vehicles in an engine family will be equipped with air conditioning, the road load power shall be increased by 10%, not to exceed 1.4 horsepower before rounding, for testing all test vehicles representing such engine family if those vehicles are intended to be offered with air conditioning in production.

- f. Paragraph 86.078-25(a) (Maintenance) is amended as follows:  
25(a)(1)(i)(A) For gasoline-fueled vehicles, the following items may be inspected, replaced, cleaned, adjusted, and/or serviced as required:

- (1) Valve lash
- (2) Air filter (no more frequently than once every 30,000 miles).

25(a)(1)(iii) (Adjustment of engine idle speed during first 5,000 miles of vehicle operation.) Deleted.

25(a)(3) (Service of exhaust gas recirculation systems.) Deleted.

25(a)(4) (Service of catalytic converter.) Deleted.

25(a)(8)(i) The first sentence (adjustment of engine idle speed) is replaced by: "Adjustment of engine idle speed on emission data vehicles may be performed only if the idle speed exceeds the manufacturer's recommended idle speed by 300 rpm or more, or if there is a problem of stalling."

- g. Any maintenance allowed by the Executive Officer pursuant to Section 86.078-25(a)(5)(iii) shall be provided by the manufacturer at no cost to the vehicle owner.

- h. Notwithstanding changes in vehicle selection procedures, manufacturers may carry over data from 1979 model medium-duty vehicles to the 1980 model year.

4. Standards

The following standards represent the maximum projected exhaust emissions for the useful life of the vehicle.

Model Year	Vehicle Type*	Equivalent Inertia Weight (lbs.)**	Exhaust Emission Standards (grams per vehicle mile)		
			Non-Methane Hydrocarbons	Carbon Monoxide	Oxides of Nitrogen
1980	PC	All	0.41	9.0	1.0
	LDT	0-3999	0.41	9.0	1.5
	LDT	4000-5999	0.50	9.0	2.0
	MDV	All	0.9	17	2.3
1981 and subsequent	PC	All	0.41	9.0	1.0
	LDT, MDV	0-3999	0.41	9.0	1.0
	LDT, MDV	4000-5999	0.50	9.0	1.5
	MDV	6000 and larger	0.60	9.0	2.0

\*"PC" means passenger cars.

"LDT" means light-duty trucks.

"MDV" means medium-duty vehicles

\*\*Equivalent inertia weights are as determined under Section 86.129-79(a).

5. Additional Requirements

Subparagraphs (5)(d) and (5)(e) below do not apply to 1980 model light-duty trucks and medium-duty vehicles.

- a. A statement must be supplied that the production vehicles shall be in all material respects the same as those for which approval is granted.
- b. If a gasoline-fueled vehicle manufacturer requires the use of unleaded fuel, a statement will be required that the engine and transmission combinations for which approval is requested are designed to operate satisfactorily on a gasoline having a research octane number not greater than 91.
- c. Labeling required pursuant to paragraph 86.078-35 shall also contain the following statement:

"This vehicle conforms to California regulations applicable to (insert current year) model-year new vehicles."

Samples of working models of these labels may be required by the board as needed for inspection and approval, and may be retained by the board for reference and comparison purposes.

- d. Evidence must be supplied that the emission control systems on certified vehicles provide approximately the same percentage control of emissions at altitudes of up to 6,000 feet as these systems provide at sea level.
- e. The mechanism for adjusting the idle air/fuel mixture, if any shall be designed so that either:
  - i) the mixture cannot be adjusted without the use of special tools and/or procedures not readily available to the general public or the service industry including franchised dealers; or
  - ii) the mixture cannot be adjusted outside the range of the manufacturer's specification, if any,  $\pm 0.5\%$  CO, as measured at the tailpipe with all emission control components operating normally.

The manufacturer shall submit the proposed method for compliance with this requirement in his preliminary application for certification.

CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES  
FOR 1975 THROUGH ~~1978~~ 1979 MODEL  
PASSENGER CARS, LIGHT-DUTY TRUCKS  
AND MEDIUM-DUTY VEHICLES

*Note: These procedures are printed in a style to indicate the adopted changes.  
New text is underlined and deleted portions are noted by strikeout type.*

ADOPTED: February 19, 1975  
AMENDED: March 17, 1975  
AMENDED: April 16, 1975  
AMENDED: February 20, 1976  
AMENDED: March 31, 1976  
AMENDED: April 28, 1976  
AMENDED: June 30, 1976  
AMENDED: November 23, 1976

CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES  
FOR 1975 THROUGH ~~1978~~ 1979 MODEL  
PASSENGER CARS, LIGHT-DUTY TRUCKS  
AND MEDIUM-DUTY VEHICLES

The provisions of Subparts A, C, and D, plus portions of Subparts H and I, Part 85, Title 40, Code of Federal Regulations, as they existed on January 1, 1975, are hereby adopted as California's Exhaust Emission Standards and Test Procedures for 1975 Through ~~1978~~ 1979 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles, according to the following table and with the following exceptions and additions:

FUEL	MODEL YEAR	VEHICLE CLASS
GASOLINE	<del>1975-1978</del> 1979 <del>1975-1978</del> 1979 1978- <u>1979</u>	PASSENGER CARS LIGHT-DUTY TRUCKS MEDIUM-DUTY VEHICLES
DIESEL FUEL	1978-1979 1978- <u>1979</u>	LIGHT-DUTY TRUCKS MEDIUM-DUTY VEHICLES

1. The Subparts apply as follows to the classifications noted, excluding motorcycles and vehicles with less than 50 cubic inches displacement:
  - 1.a. Gasoline-fueled 1975 through ~~1978~~ 1979 model passenger cars are covered by Subpart A.
  - 1.b. Gasoline-fueled 1975 through ~~1978~~ 1979 model light-duty trucks are covered by Subpart C.
  - 1.c. Gasoline-fueled 1978 and 1979 model medium-duty vehicles are covered by the following subparagraphs, in several Subparts, in the sequence listed:

85.703 through 85.706  
85.774-2 through 85.774-4  
85.275-5(a)(2) through (4) (also refer to paragraph 6 of this standard)  
85.774-5(b),(c),(d) and (f) (also refer to paragraph 6 of this standard)  
Paragraph 7 of this standard  
85.275-5(f)  
85.275-6 through -29  
Paragraph 8 of this standard  
85.774-31 through -35  
85.774-28 and -39



1.d. Diesel-fueled 1978 and 1979 model light-duty trucks are covered by Subpart D.

1.e. Diesel-fueled 1978 and 1979 model medium-duty vehicles are covered by the following subparagraphs, in the sequence listed:

85.903 through 85.906  
85.974-2 through 85.974-4  
85.376-5(a)(2) through (4) (also refer to paragraph 6 of this standard)  
85.774-5(b),(c),(d) and (f) (also refer to paragraph 6 of this standard)  
Paragraph 7 of this standard  
85.376-5(f)  
85.376-6 through -29  
Paragraph 8 of this standard  
85.974-31 through -35  
85.974-38 and -39

1.f. A manufacturer may elect to certify 1978 model heavy-duty vehicles of 10,000 pounds maximum gross vehicle weight rating or less as medium-duty vehicles, in which event heavy-duty emission standards and test procedures will not apply.

2. Definitions: Any applicable definition in the California Health and Safety Code, Division 26, or in the California Vehicle Code as incorporated into Division 26, shall apply, and if inconsistent with any definition in these test procedures these Codes shall take precedence.

- a. "Administrator" means the Executive Officer of the Air Resources Board.
- b. "Certificate of Conformity" means "Executive Order" certifying vehicles for sale in California.
- c. "Certification" means "Certification" as defined in Section 39018 of the Health and Safety Code.
- d. "Passenger car" means any motor vehicle designed primarily for transportation of persons and having a capacity of twelve persons or less.
- e. "Heavy-duty engine" means an engine which is used to propel a heavy-duty vehicle.
- f. "Heavy-duty vehicle" means any motor vehicle having a manufacturer's gross vehicle weight rating greater than 6,000 pounds, except passenger cars.

- g. "Light-duty truck" means any motor vehicle, rated at 6,000 pounds gross vehicle weight or less, which is designed primarily for purposes of transportation of property or is a derivative of such a vehicle, or is available with special features enabling off-street or off-highway operation and use.
- h. "Medium-duty vehicle" means any heavy-duty vehicle having a manufacturer's gross vehicle weight rating of 8500 pounds or less.
- i. "Incomplete truck" means any truck which does not have the primary load carrying device or container attached.
- j. ~~"Loaded vehicle weight" means:~~
  - ~~(1) -- For passenger cars, the vehicle curb weight plus 300 pounds.~~
  - ~~(2) -- For light-duty trucks and medium-duty vehicles, the vehicle curb weight plus 500 pounds, not to exceed the GVW rating.~~
- k. "Vehicle curb weight" means, for incomplete trucks, 75% of the GVW rating or any higher vehicle curb weight specified by the manufacturer.
- k. "Basic vehicle frontal area" means the area enclosed by the geometric projection of the basic vehicle along the longitudinal axis, which includes tires but excludes mirrors and deflectors, onto a plane perpendicular to the longitudinal axis of the vehicle.
- l. "Van" means a light-duty truck or medium-duty vehicle having an integral enclosure, fully enclosing the driver compartment and load carrying device, and having no body sections protruding more than 30 inches ahead of the leading edge of the windshield.
- 3. Any reference to vehicle sales throughout the United States shall mean vehicle sales in California.
- 4. Regulations concerning EPA hearings, EPA inspections, specific language on the Certificate of Conformity, and evaporative emissions shall not be applicable to these procedures.
- 5. Durability data submitted pursuant to subparagraphs 85.075-5(f), 85.275-5(f) or 85.376-5(f) may be from vehicles previously certified or approved by EPA or ARB, notwithstanding the changes in road load horsepower and ballast requirements specified in paragraphs 16 and 17 below.

6. Division and selection of medium-duty vehicle (MDV) engines.
    - 6.a. The engines used in 1978 model MDVs shall be divided into engine families based on the criteria of subparagraphs 85.275-5(a)(2) through (4) or 85.376-5(a)(2) through (4). These engine families include engines for both light-duty trucks (LDTs) and MDVs.
    - 6.b. Division of engine families into codes and selection of codes to be tested shall be in accordance with subparagraphs 85.774-5(b), (c), (d) and (f).
  7. Selection and testing of Medium-duty Vehicles.
    - 7.a. For each engine code selected in 6.b., the manufacturer shall determine if more than 50% of projected sales are derived from LDTs or MDVs.

If LDTs are the majority, proceed to 7.b.  
If MDVs are the majority, proceed to 7.c.
    - 7.b. Determine if the code, as selected in 6.b., is used in one of the LDTs which was selected in Subpart C, subparagraph 85.275-5 (gasoline) or Subpart D, subparagraph 85.376-5 (diesel).

A manufacturer has the following options:

If the answer to 7.b. is affirmative, proceed to 8.a. or, if preferred, to 7.c.

If the answer to 7.b. is negative, proceed to 7.c.
    - 7.c. Select the inertia weight class/transmission combination with the highest sales.
    - 7.d. For the combination selected in 7.c., select the axle ratio with the highest sales.
    - 7.e. One MDV, built to the exact specification of each combination selected in 7.d., shall be tested in accordance with:
      - Subpart C, for gasoline-fueled LDTs, following durability or emission data vehicle requirements as applicable.
      - Subpart D, for diesel-fueled LDTs, following durability or emission data vehicle requirements as applicable.
- MDVs tested to LDT procedures of subparts C or D must meet MDV emission standards, paragraph 13.

8. Certification of MDV engines.
  - 8.a. Engine codes classified as affirmative in 7.b. shall be certified for all MDV applications of the selected engine code, provided that compliance with LDT standards is demonstrated.
  - 8.b. Engine codes in MDVs which meet the test requirements of 7.e. shall be certified for all MDV applications of the selected engine code.
9. The requirements in subparagraphs 85.075-28(c)(1)(ii), 85.275-28(c)(1)(ii) and 85.376-28(c)(1)(ii) (durability vehicles must meet emission standards) refer to Federal Emission standards.
10. Labeling required pursuant to paragraphs 85.075-35 and 85.275-35 shall also conform to Section 1965 of Title 13, California Administrative Code. For diesel-powered light-duty trucks and medium-duty vehicles, the requirements of subparagraph 85.376-35(a)(4)(v) do not apply. Labeling required pursuant to subparagraph 85.376-35 shall contain the statement "This vehicle conforms to California regulations applicable to (insert current year) model-year new vehicles." Labeling is also required which conforms to Section 43200 of the California Health and Safety Code.
11. A statement must be supplied that the production vehicles shall be in all material respects the same design as those for which vehicle approval is granted.
12. If a gasoline-fueled vehicle manufacturer requires the use of unleaded fuel, a statement will be required that the engine and transmission combinations for which approval is requested are designed to operate satisfactorily on a gasoline having a research octane number not greater than 91.
13. The following standards represent the maximum projected exhaust emissions for the useful life of the vehicle.

Exhaust Emission Standards  
(grams per vehicle mile)

<u>Model Year</u>	<u>Vehicle Type*</u>	<u>Equivalent Inertia Weight (lbs.)</u>	<u>Hydrocarbon</u>	<u>Carbon Monoxide</u>	<u>Oxides of Nitrogen</u>
1975	PC	All	0.9	9.0	2.0
	LDT***	All	2.0	20	2.0
1976	PC	All	0.9**	9.0	2.0
	LDT	All	0.9	17	2.0
1977	PC	All	0.41	9.0	1.5
	LDT	All	0.9	17	2.0
1978	PC	All	0.41	9.0	1.5
	LDT	All	0.9	17	2.0
	MDV	All	0.9	17	2.3
1979	PC	All	0.41	9.0	1.5
	LDT	0-3999	0.41	9.0	1.5
	LDT	4000-5999	0.50	9.0	2.0
	MDV	All	0.9	17	2.3

\*"PC" means passenger cars.

"LDT" means light-duty trucks.

"MDV" means medium-duty vehicles.

\*\*Except that hydrocarbon emissions from limited-production vehicles shall not exceed 1.5 grams per vehicle mile.

\*\*\*These standards apply to 1975 and 1976 limited-production light-duty trucks.

14. Regulations requiring testing of new vehicles intended for initial sale at high altitudes are not adopted.
15. For the 1977 and subsequent model years, subparagraphs 85.075-28 (c)(2)(i), 85.275-28 (c)(2)(i), and 85.376-28 (c)(2)(i), are amended to read:

The exhaust emission test results for each emission data vehicle shall be multiplied by the appropriate deterioration factor: Provided, that if a deterioration factor as computed in paragraph (c)(1)(iii) is less than one, that deterioration factor shall be one for the purposes of this paragraph. After multiplying the emission data vehicle's hydrocarbon exhaust emission value by the appropriate deterioration factor the following methane content correction factor will be applied:

- A. For all passenger cars, light-duty trucks and medium-duty vehicles not equipped with an oxidation catalyst the methane content correction factor shall be a multiplicative factor of 1.00.
- B. For oxidation catalyst equipped passenger cars the methane content correction factor shall be a multiplicative factor of 0.89.
- C. For light-duty trucks and medium-duty vehicles equipped with oxidation catalysts the methane content correction factor shall be a multiplicative factor of 1.00.

If any manufacturer has reason to believe that the above methane content correction factors are not appropriate for his exhaust emission control system he may present evidence to the Executive Officer to support this claim. After examining the manufacturer's data, the Executive Officer may designate a methane content correction factor different from those stated above.

16. Beginning with 1978 models, the equivalent-inertia-weight and road load horsepower for light-duty trucks and medium-duty vehicles shall be derived ~~from the following table:~~ as follows:

- a. For all light-duty trucks and medium-duty vehicles, except vans, and for heavy-duty vehicles optionally certified as medium-duty vehicles, the road load power (horsepower) at 50 mph shall be 0.58 times "A", rounded to the nearest 0.5 horsepower.
- b. For vans, the road load power (horsepower) shall be 0.50 times "A", rounded to the nearest 0.5 horsepower.
- c. "A" is the basic vehicle frontal area (ft<sup>2</sup>) plus the additional frontal area (ft<sup>2</sup>) of mirrors and optional equipment exceeding 0.1 square feet and which are sold on more than 33% of the car line.

<u>Loaded-Vehicle Weight-(pounds)</u>	<u>Equivalent-Inertia Weight-(pounds)</u>	<u>Road-Load-Power-at 50-m-p-h-(horsepower)</u>
Up-to-1,225	1,000	9.5
1,226-to-1,375	1,250	10.3
1,376-to-1,625	1,500	11.0
1,626-to-1,875	1,750	12.0
1,876-to-2,125	2,000	12.8
2,126-to-2,375	2,250	13.6
2,376-to-2,625	2,500	14.5
2,626-to-2,875	2,750	15.3
2,876-to-3,250	3,000	16.1
3,251-to-3,750	3,500	17.7
3,751-to-4,250	4,000	19.4
4,251-to-4,750	4,500	21.0
4,751-to-5,250	5,000	22.7
5,251-to-5,750	5,500	24.3
5,751-to-6,250	6,000	25.9
6,251-to-6,750	6,500	27.6
6,751-to-7,250	7,000	29.2
7,251-to-7,750	7,500	30.9
7,751-to-8,250	8,000	32.5
8,251-to-8,750	8,500	34.2
8,751-to-9,250	9,000	35.8
9,251-to-9,750	9,500	37.4
9,751-to-10,000	10,000	39.1

d. The Executive Officer may allow use of road load horsepower values at 50 mph other than the values listed in the table above, calculated using the above method.

e. Where it is expected that more than 33% of the vehicles in an engine family will be equipped with air conditioning, the road load power as determined under subparagraphs (a), (b), or (d) above shall be increased by 10%, not to exceed 1.4 horsepower before rounding, for testing all test vehicles representing such engine family if those vehicles are intended to be offered with air conditioning in production.

17.--Beginning with 1978 models, light-duty trucks and medium-duty vehicles will carry a simulated payload of 200 pounds of ballast for mileage accumulation.

17. Mileage will be accumulated on four wheel drive vehicles in their normal on-highway mode of operation. For emissions testing, four wheel drive vehicles will be tested in a two wheel drive mode of operation. Full time four wheel drive vehicles will have the front drive wheels temporarily disengaged by the vehicle manufacturer. Four wheel drive vehicles which can be manually shifted to a two wheel drive mode will be tested in the normal on-highway two wheel drive mode of operation.

18. The Executive Officer may allow any manufacturer who meets all of the following conditions to certify 1978 model-year medium-duty vehicles according to heavy-duty standards and test requirements:

1. The manufacturer has not and/or will not produce any 1977 model-year light-duty vehicles for sale in California.
2. The manufacturer demonstrates that there is inadequate lead time to develop or purchase the technology needed to meet the 1978 medium-duty vehicle standards.
3. The manufacturer states that one additional year's time will allow the development or purchase of such technology.



State of California  
AIR RESOURCES BOARD

RESOLUTION 76-45

November 23, 1976

WHEREAS, Section 39601 of the Health and Safety Code authorizes the Air Resources Board to adopt standards, rules, and regulations necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law;

WHEREAS, Sections 43101 and 43104 of the Health and Safety Code authorize the Board to adopt vehicle emission standards and test procedures in order to control or eliminate air pollution caused by motor vehicles;

WHEREAS, the Board has found that more stringent evaporative emission standards for motor vehicles are needed to achieve the ambient air quality standards in the South Coast Air Basin and in other areas of the state;

WHEREAS, based on information submitted to the Board and to the United States Environmental Protection Agency the Board has found that more stringent evaporative emission standards for motor vehicles are, commencing with the 1980 model-year, both technologically feasible and cost/effective; and

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of the Administrative Procedure Act (Government Code, Title 2, Division 3, Part 1, Chapter 4.5);

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby amends its regulations in Article 2, Subchapter 1, Chapter 3 of Title 13, California Administrative Code as follows:

Amend Section 1976(b) as follows:

1976. [Standards and Test Procedures for Fuel Evaporative Emissions from Gasoline-Powered Vehicles.]

- (b) Evaporative emissions from new 1978 and subsequent model-year gasoline-powered motor vehicles except motorcycles shall not exceed: 6.0-grams-of-hydrocarbons-per-test.

Evaporative Emission Standards  
(grams per test)

	<u>Hydrocarbons</u>
<u>1978-79</u>	<u>6.0</u>
<u>1980 and later</u>	<u>2.0</u>

The procedure for determining compliance with ~~this~~ these standards is set forth in "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Gasoline-Powered Motor Vehicles except Motorcycles," adopted by the Air Resources Board on April 16, 1975, ~~and as~~ amended on May 14, 1975, March 31, 1976, and October 5, 1976, and November 23, 1976.

BE IT FURTHER RESOLVED, that the Board hereby adopts the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Gasoline-Powered Motor Vehicles except Motorcycles" dated April 16, 1975, as last amended November 23, 1976.

CALIFORNIA EVAPORATIVE EMISSION  
STANDARDS AND TEST PROCEDURES  
FOR 1978 AND SUBSEQUENT MODEL  
GASOLINE-POWERED MOTOR VEHICLES  
EXCEPT MOTORCYCLES

The provisions of Title 40, Code of Federal Regulation, Part 86, Subparts A and B, as they pertain to evaporative emission standard and test procedures and as they existed on September 22, 1976, are hereby adopted as the California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Gasoline-Powered Motor Vehicles Except Motorcycles, with the following exceptions and additions:

1. ~~This~~ These standards and these test procedures are applicable to all new 1978 and subsequent model gasoline-powered passenger cars, light-duty trucks, medium-duty vehicles and heavy-duty vehicles with engine displacements of greater than 50 cubic inches which are subject to registration and first sold and registered in this state. The evaporative emission standards are:

<u>Model Year</u>	<u>Hydrocarbons (grams per test)</u>
<u>1978-79</u>	<u>6.0</u>
<u>1980 and later</u>	<u>2.0</u>

2. The definitions in Section 1900, Title 13, California Administrative Code, and in the applicable model year California exhaust emission standards and test procedures, are hereby incorporated into this test procedure by reference.
3. Approval of medium-duty vehicles shall be based on the same standard and test procedures as light-duty trucks. In selecting medium-duty test vehicles the Executive Officer shall consider the availability of test data from comparably equipped light-duty vehicles and the size of medium-duty vehicles at it relates to the practicability of evaporative emission testing.
4. Demonstration of system durability and determination of an evaporative emission deterioration factor for each evaporative emission engine family shall be based on tests of representative vehicles and/or systems. For purposes of evaporative emission durability testing a representative vehicle is one which, with the possible exception of the engine and drivetrain, was built at least three months prior to the commencement of evaporative emission testing, or is one which the manufacturer demonstrates has stabilized non-fuel-related evaporative emissions.
  - a. For 1978 model evaporative emission engine families which require durability testing for exhaust emissions certification, either
    - i. Evaporative emission testing shall be conducted on all durability vehicles at the 5,000, 10,000, 20,000, 30,000, 40,000, and 50,000 mile test points. Testing may be performed at more frequent intervals with advance written

approval from the Executive Officer. The results of all valid evaporative emission tests within each evaporative emission engine family shall be plotted as a function of mileage, and a least-squares fit straight line shall be drawn through the data. The evaporative emission deterioration factor is defined as the interpolated 50,000 mile value on that line minus the extrapolated 4,000 mile value on that line, but in no case shall the factor be less than zero.

OR

ii. The manufacturer shall propose in his preliminary application for approval a method for durability testing and for determination of a deterioration factor for each evaporative emission engine family. The Executive Officer shall review the method, and shall approve it if it meets the following requirements:

- A. The method must cycle and test the complete evaporative emission control system for the equivalent of at least 50,000 miles of typical customer use.
- B. The method must reflect the flow of liquid and gaseous fuel through the evaporative emission control system, and the exposure (both peak and cyclical) to heat, vibration, and ozone expected through 50,000 miles of typical customer use.
- C. The method must have specifications for acceptable system performance, including maximum allowable leakage after 50,000 miles of typical customer use.

No evaporative emission control system durability testing shall be required for 1978 model year vehicles which do not require exhaust emission control system durability testing unless the Executive Officer determines that durability performance is likely to be significantly inferior to 1977 model year systems.

- b. For 1979 and later model evaporative emission engine families, both (4)(a)(i) and (4)(a)(ii) shall apply to all families selected for exhaust emission durability testing, and (4)(a)(ii) shall apply to those evaporative emission engine families which are not subject to testing for exhaust emission durability. The deterioration factors determined under (4)(a)(i), if any, shall be averaged with the deterioration factors determined under (4)(a)(ii) to determine a single evaporative emission deterioration factor for each evaporative emission engine family.

5. Approval of heavy-duty vehicles, excluding medium-duty vehicles, shall be based on an engineering evaluation of the system and data submitted by the applicant. Such evaluation may include successful public usage on light-duty or medium-duty vehicles, adequate capacity of storage containers, routing of lines to prevent siphoning, and other emission-related factors deemed appropriate by the Executive Officer. In the event that the U.S. Environmental Protection Agency does not grant California a waiver to implement Section 3 of this procedure, then Section 5 shall also apply to medium-duty vehicles.
6. The measured evaporative emissions from all test vehicles except vehicles tested pursuant to paragraph 4 above shall be corrected for background emissions by subtracting 1.0 grams per test.

State of California

AIR RESOURCES BOARD

Resolution 76-46

November 24, 1976

WHEREAS, an unsolicited proposal No. 5-338-14abc entitled "Chemical Consequences of Air Quality Standards and of Control Implementation Programs: Roles of Hydrocarbons, Oxides of Nitrogen, Oxides of Sulfur and Aged Smog in the Production of Photochemical Oxidant and Aerosol" by the Statewide Air Pollution Research Center of the University of California at Riverside has been submitted to the Air Resources Board;

WHEREAS, The proposal has been reviewed and recommended for approval by the Research staff; and

WHEREAS, the Research Screening Committee has recommended for funding:

ARB Proposal No. 5-338-14abc entitled "Chemical Consequences of Air Quality Standards and of Control Implementation Programs: Roles of Hydrocarbons, Oxides of Nitrogen, Oxides of Sulfur and Aged Smog in the Production of Photochemical Oxidant and Aerosol", in an amount not to exceed \$135,981,

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board under the powers and authority granted by the Health and Safety Code, Section 39705 hereby accepts the recommendations of the Research Screening Committee and approves the following proposal:

ARB Proposal No. 5-338-14abc entitled "Chemical Consequences of Air Quality Standards and of Control Implementation Programs: Roles of Hydrocarbons, Oxides of Nitrogen, Oxides of Sulfur and Aged Smog in the Production of Photochemical Oxidant and Aerosol", in an amount not to exceed \$135,981,

and authorizes the Executive Officer to initiate administrative procedures and to execute all necessary documents and contracts for the proposed research project in an amount not to exceed \$135,981.

State of California

AIR RESOURCES BOARD

Resolution 76-47

November 24, 1976

WHEREAS, an unsolicited proposal No. 462-30a entitled "Detailed Characterization of Gaseous and Size-Resolved Particulate Pollutants at a South Coast Air Basin Smog Receptor Site: Levels and Modes of Formation of Sulfate, Nitrate and Organic Particulates and their Implications for Control Strategies" has been submitted to the Air Resources Board;

WHEREAS, The proposal has been reviewed and recommended for approval by the Research staff; and

WHEREAS, the Research Screening Committee has recommended for funding:

ARB Proposal No. 462-30a entitled "Detailed Characterization of Gaseous and Size-Resolved Particulate Pollutants at a South Coast Air Basin Smog Receptor Site: Levels and Modes of Formation of Sulfate, Nitrate and Organic Particulates and their Implications for Control Strategies" submitted by the Statewide Air Pollution Research Center, University of California at Riverside, in an amount not to exceed \$140,769.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board under the powers and authority granted by the Health and Safety Code, Section 39705 hereby accepts the recommendations of the Research Screening Committee and approves the following proposal:

ARB Proposal No. 462-30a entitled "Detailed Characterization of Gaseous and Size-Resolved Particulate Pollutants at a South Coast Air Basin Smog Receptor Site: Levels and Modes of Formation of Sulfate, Nitrate and Organic Particulates and their Implications for Control Strategies" submitted by the Statewide Air Pollution Research Center, University of California at Riverside, in an amount not to exceed \$140,769.

and authorizes the Executive Officer to initiate administrative procedures and to execute all necessary documents and contracts for the proposed research project in an amount not to exceed \$140,769.

State of California

AIR RESOURCES BOARD

Resolution 76-48

November 24, 1976

WHEREAS, an unsolicited proposal No. 472-30a entitled "The Effect of Environmental Variables and Sampling Media on the Collection of Atmospheric Sulfate and Nitrate" by the Air and Industrial Hygiene Laboratory of the California Department of Health has been submitted to the Air Resources Board;

WHEREAS, The proposal has been reviewed and recommended for approval by the Research staff; and

WHEREAS, the Research Screening Committee has recommended for funding:

ARB Proposal No. 472-30a entitled "The Effect of Environmental Variables and Sampling Media on the Collection of Atmospheric Sulfate and Nitrate" by the Air and Industrial Hygiene Laboratory of the California Department of Health, in an amount not to exceed \$34,405,

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board under the powers and authority granted by the Health and Safety Code, Section 39705 hereby accepts the recommendations of the Research Screening Committee and approves the following proposal:

ARB Proposal No. 472-30a entitled "The Effect of Environmental Variables and Sampling Media on the Collection of Atmospheric Sulfate and Nitrate" by the Air and Industrial Hygiene Laboratory of the California Department of Health, in an amount not to exceed \$34,405,

and authorizes the Executive Officer to initiate administrative procedures and to execute all necessary documents and contracts for the proposed research project in an amount not to exceed \$34,405.