State of California
AIR RESOURCES BOARD

RESOLUTIONS

No.	Item	Staff	Hearing Scheduled	Date Adopted	+ EIS to Resources
94-1	OFF-HIGHWAY RECREATIONAL VEHICLES	MSD	1/13/94	1/13/94	
94-2	Research Proposal No. 2120-179, "Development of Methods and Analysis for Three Pesticides, etc. by, UCD $74,999.	RD	1/13/94	1/13/94	
94-3	Research Proposal No. 2100-178R, "Lifetimes and Fates of Toxic Air Contaminants in CA Atmosphere, by UC, Riverside $74,945.	RD	1/13/94	1/13/94	
94-4	Research Proposal No. 2121-179, "Evaluating the Effects of Parking Cash-Out (AB2109), UCLA, $73,306.	RD	1/13/94	1/13/94	
94-5	Research Proposal No. 2119-179 "Impact of Improved Emissions Char. for Nitrogen-Containing APs, by UC,Berkeley $47,125	RD	1/13/94	1/13/94	
94-6	Research Proposal No. 256-51, "Assessing the Potential Impact of Acid Deposition, etc., by UC, SB $60,797.	RD	1/13/94	1/13/94	
94-7	Evaporative Emission Regs	MSD	2/10/94	2/10/94	
94-8	Betty Ichikawa	EO	2/10/94	2/10/94	
94-9	Jananne Sharpless	EO	2/10/94	2/10/94	
94-10	Andrew Wortman	EO	3/10/94	5/12/94	
94-11	RECLAIM	EO	3/10/94	3/10/94	3/21/94
94-12	Research Proposal No. 2101-178, "Heavy-Duty Truck Popul., Activity & Usage Patterns, J. Faucett, $193,566	EO	3/10/94	3/10/94	
94-13	Research Proposal No. 2122-180, "Improvement of Spec. Profiles for Arch. & Indus.,etc. CPSUF, $150,000	EO	3/10/94	3/10/94	
94-14	Proposal No. 2105-178, "Determination of Formaldehyde & Toluene Diisocyanate Emissions from Indoor Res. Sources, Battelle, $298,719	EO	3/10/94	3/10/94	
94-15	Proposal No. 2126-180, "Characterization of Ozone Episodes in South Co. Air Basin: Effects of Air Parcel Res. Time & WD/W.E. Diff., UCLA, $59,627	EO	3/10/94	3/10/94	
94-16	Proposal No. 2123-180, "Toxicity of Chemical Constituents of PM10 in the South Coast Air Basin of CA, UC Irvine, $598,900	EO	3/10/94	3/10/94	

State of California
AIR RESOURCES BOARD

RESOLUTIONS

No.	Item	Staff	Hearing Scheduled	Date Adopted	+ EIS to Resources
94-17	Proposal No. 2124-180, "The Effects of Multi-day Exposure to NO2 on Human Cellular Immunity," UC, SF $315,495	EO	3/10/94	3/10/94	
94-18	Proposal No. 251-49, "Development of a Computationally Efficient Acid Deposition Model for CA, CA Institute of Tech., $299,983	EO	3/10/94	3/10/94	
94-19	CCAA FEE REGS	TSD	4/14/94	4/14/94	
94-20	Proposal No. 2149-181, "Study to Refine Cold- and Hot- Start Emissions," GM Powertrain Division, GMC $549,577	RD	4/14/94	WITHDRAWN	
94-21	Proposal No. 2140-181, "Reclamation of Automotive Batteries: Assessment of Health Impacts and Recycling Technology," Acurex Env. Corp. $74,580	RD	4/14/94	4/14/94	
94-22	Proposal No. 2133-181, "Student-Related Trip Reduction Strategies," JHK and Associates $173,614	RD	4/14/94	WITHDRAWN	
94-23	Proposal No. 2114-178, "Demonstration of a Low-Emitting Two-Stroke Utility Engine," Engine, Fuel and Emissions Engineering $299,965	RD	4/14/94	WITHDRAWN	
94-24	Proposal No. 2155-181, "Planning, Coordination, and Field Management of the 1996 Southern CA Ozone Monitoring Program," Desert Research Inst. $199,997	RD	4/14/94	4/14/94	
94-25	Proposal No. 2129-181, "Cardiovascular Effects of Controlled Ozone Exposure in Cardiac Patients," Los Amigos Research & Ed. Inst. $247,588	RD	4/14/94	WITHDRAWN	
94-26	Proposal No. 2127-180, "Development of a Meteorological and Air Quality Info System for Greater San Joaquin Valley," CSU, Chico $49,885	RD	4/14/94	4/14/94	
94-27	Proposal No. 2153-181, Characterization and Control of Organic Compounds Emitted from Air Pollution Sources," CA Inst. of Technology $392,789	RD	4/14/94	4/14/94	
94-28	Proposal No. 2158-181, "Development and Field Test of a 2-Dimentional Vertically Scanning Ozone Lidar," National Oceanic & Atmos. Admin. $110,482	RD	4/14/94	4/14/94	
94-29	Proposal No. 2157-181, "Pulmonary Macrophage Release of Inflammatory Cytokines After Multi-day Exposure to Ozone & Nitric Acid," UC,S.F. $57,998	RD	4/14/94	4/14/94	
94-30	Proposal No. 257-51, "A Critical Assessment of the Health Effects of Atmospheric Acidity," New York University $69,419	RD	4/14/94	4/14/94	
94-31	Proposal No. 261-52, "CA Acid Deposition Monitoring Program Data Validation and Analysis," Charles Blanchard $14,900	RD	4/14/94	4/14/94	
94-32	Proposal No. 258-52, "Evaluation Study of Nitric Acid Measurement of CADMP Sampler," UC Riverside $104,803	RD	4/14/94	4/14/94	

State of California
AIR RESOURCES BOARD

RESOLUTIONS

No.	Item	Staff	Hearing Scheduled	Date Adopted	+ EIS to Resources
94-33	Proposal No. 262-52, "Atmospheric Deposition to Agricultural Soils," UC, Riverside $9,904	RD	4/14/94	4/14/94	
94-34	Proposal No. 259-52, "Modification of Ozone Effects by Acidic Particles," UC, S.F. $97,000	RD	4/14/94	4/14/94	
94-35	Proposal No. 260-52, "Atmospheric Acidity Protection Program Assessment Workshop," UC, Irvine $46,476	RD	4/14/94	4/14/94	
94-36	LEV/ZEV STATUS REPORT	MSD	5/12-13/94	NOT USED	
94-37	GLADYS MEADE	EO	5/12-13/94	5/13/94	
94-38	PREDICTIVE MODEL	SSD	6/9/94	6/9/94	
94-39	PLANNED AIR POLLUTION RESEARCH - 1994 UPDATE	RD	6/9/94	6/9/94	
94-40	PROPOSAL NO. 2135-181, "SOLVENT CLEANING/DEGREASING SOURCE CATEGORY EMISSION INVENTORY," E.H. PECHAN AND ASSOC. $174,175	RD	6/9/94	6/9/94	
94-41	Proposal No. 2149-181, "Study to Redefine Cold- and Hot- Start Emissions," GM Powertrain Division, GMC $549,577	RD	6/9/94	6/9/94	
94-42	Proposal No. 2129-181, "Cardiovascular Effects of Controlled Ozone Exposure in Cardiac Patients," Los Amigos Research & Ed Inst. $247,588	RD	6/9/94	6/9/94	
94-43	Proposal No. 2161-182, "Prototype Demonstration of CHA NOx Removal Process for Treatment of Diesel Eng. Exhaust, " SMUD $15,000	RD	6/9/94	6/9/94	
94-44	Proposal No. 2159-182, "Industrial Surface Coatings -Wood-Furniture and Fixtures Emission Inventory Dev.," UC, Davis $120,137	RD	6/9/94	6/9/94	
94-45	Proposal No. 2160-182, "Coating Operations Test Method Development Survey," UC, Davis $101,779	RD	6/9/94	6/9/94	
94-46	Proposal No. 266-53," A Review of Nitric Acid Measurements by TDLAS," UC, Riverside $32,129	RD	6/9/94	6/9/94	
94-47	Proposal No. 265-53, "Further Evaluation of a Two-Week Sampler for Acidic Gases and Fine Particles," UC, Riverside $141,086	RD	6/9/94	6/9/94	
94-48	Proposal No. 264-53, "Evaluation of a Sampling Methodology for Acidic Species," UC, Riverside $311,767	RD	6/9/94	6/9/94	

State of California
AIR RESOURCES BOARD

RESOLUTIONS

No.	Item	Staff	Hearing Scheduled	Date Adopted	+ EIS to Resources
94-49	RIDESHARING DEFINITIONS	EO	6/9/94	6/9/94	
94-50	UTILITY AND LAWN AND GARDEN EQUIPMENT	MSD	7/28/94	7/28/94	
94-51	AIR TOXICS HOT SPOTS FEE REGS	SSD	7/28/94	7/28/94	
94-52	SMALL REFINERS VOLUME PROVISIONS	SSD	7/29/94	7/28/94	
94-53	CERTIFICATION SPECIFICATIONS	SSD	9/22/94	9/22/94	
94-54	ACP FOR CONSUMER PRODUCTS	SSD	9/22/94	9/22/94	
94-55	ACID DEPOSITION REPORT	RD	9/22/94	9/22/94	
94-56	HD RETROFIT REPORT TO LEGISLATURE	MSD	10/27/94	10/27/94	
94-57	PROPOSAL NO.2166-185, "PRODUCT STUDIES OF THE ATMOSPHERICALLY IMPORTANT REACTIONS OF ALKENES AND AROMATIC HYDROCARBONS," UC RIVERSIDE $139,110	RD	10/27/94	10/27/94	
94-58	PROPOSAL NO. 2167-185, "EVALUATION OF FACTORS THAT AFFECT DIESEL EXHAUST TOXICITY," UC RIVERSIDE $499,973	RD	10/27/94	10/27/94	
94-59	AREA DESIGNATIONS	TDS	11/9-10/94	11/10/94	
94-60	CONSIDERATION OF CALIFORNIA'S SIP	MSD/EO/ SSD	11/9-10/94	11/15/94	
94-61	SCAQMD PLAN	EO	11/9-10/94	11/15/94	
94-62	VENTURA APCD PLAN	EO	11/9-10/94	11/15/94	
94-63	SAN DIEGO APCD PLAN	EO	11/9-10/94	11/15/94	
94-64	MOJAVE DESERT AQMD PLAN	EO	11/9-10/94	11/15/94	

State of California
AIR RESOURCES BOARD

RESOLUTIONS

No.	Item	Staff	Hearing Scheduled	Date Adopted	+ EIS to Resources
94-65	SAN JOAQUIN VALLEY UNIFIED AQMD PLAN	EO	11/9-10/94	11/15/94	
94-66	SACRAMENTO METROPOLITAN AQMD PLAN	EO	11/9-10/94	11/15/94	
94-67	OBD II	MSD	12/8/94	12/8/94	
94-68	FUEL SPECS FOR M100 FUEL	MSD	12/8/94	12/8/94	
94-69	SMOKE SELF-INSPECTION PROG DELAY	MSD	12/8/94	12/8/94	10/17/95
94-70	PROPOSAL NO. 2165-184R, "EVALUATION AND DEMONSTRATION OF WET CLEANING ALTERNATIVES TO PERCHLOROETHYLENE-BASED GARMENT CARE," UCLA $80,000	RD	12/8/94	12/8/94	
94-71	PROPOSAL NO. 2114-178, "DEMONSTRATION OF A LOW-EMITTING TWO-STROKE UTILITY ENGINE," ENGINE, FUEL AND EMISSIONS ENGINEERING, INC. $299,964	RD	12/8/94	12/8/94	
94-72	PROPOSAL NO. 2171-186, "MONITORING IN OZONE TRANSPORT CORRIDORS," TECHNICAL & BUSINESS SYSTEMS, INC. $367,070	RD	12/8/94	12/8/94	
94-73	PROPOSAL NO. 2175-186, "ANALYSIS OF THE SOUTHERN CALIFORNIA WIND PROFILER AND AIRCRAFT DATA," SYSTEMS APPLICATIONS INTERNATIONAL $142,771	RD	12/8/94	12/8/94	
94-74	BRIAN BILBRAY	EO	12/8/94	NOT USED	
94-75	HARRIETT WIEDER	EO	12/8/94	NOT USED	
94-76	JACQUELINE SCHAFER	EO	12/8/94	NOT USED	
94-77					
94-78					
94-79					
94-80					

AIR RESOURCES BOARD
2020 L STREET
P.O. BOX 2815
SACRAMENTO, CA 95814-2815

State of California
Environmental Protection Agency
AIR RESOURCES BOARD

Notice of Decision and
Response to Significant Environmental Issues

Item: PUBLIC HEARING TO CONSIDER THE ADOPTION OF EMISSION CONTROL REGULATIONS FOR OFF-HIGHWAY RECREATIONAL VEHICLES AND ENGINES.

Approved by: Resolution 94-1

Adopted by: Executive Order GG-94-064
Dated: November 22, 1994

Agenda Item No: 94-1-1

Public Hearing Date: January 13, 1994

Issuing Authority: Air Resources Board

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

Response: N/A

Certified: _____
Artavia M. Edwards
Regulations Coordinator

Date: 22 Nov 94

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State of California
AIR RESOURCES BOARD

Resolution 94-1

January 13, 1994

Agenda Item No.: 94-1-1

WHEREAS, section 39003 of the Health and Safety Code charges the Air Resources Board (ARB or Board) with coordinating efforts to attain and maintain ambient air quality standards;

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

WHEREAS, in section 43000.5 of the Health and Safety Code, the Legislature found and declared that despite significant reductions in vehicle emissions in recent years, continued growth in population and vehicle miles traveled throughout California have the potential not only to prevent attainment of the state standards, but in some cases, to result in worsening of air quality;

WHEREAS, section 43013 of the Health and Safety Code authorizes the Board to adopt standards and regulations for the control of contaminants from off-road sources, including off-highway recreational vehicles and engines used in such vehicles.

WHEREAS, section 43018 of the Health and Safety Code directs the Board to achieve the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to accomplish the attainment of state standards at the earliest possible date;

WHEREAS, sections 39515 and 39516 of the Health and Safety Code provide that the Board may delegate any duty to the Executive Officer which the Board deems appropriate and that any power, duty, purpose, function, or jurisdiction which the Board may lawfully delegate shall be conclusively presumed to have been delegated to the Executive Officer unless the Board has expressly reserved such authority onto itself;

WHEREAS, the staff has proposed adoption of regulations to be set forth in Title 13, California Code of Regulations (CCR), sections 2410-2414 and test procedures and other documents to be incorporated by reference therein for off-highway recreational vehicles, including off-road motorcycles, all-terrain vehicles, go-karts, golf carts, and specialty vehicles;

WHEREAS, such proposed regulations include emission standards, test procedures, emission control labels, and enforcement procedures, including warranties, recall, and compliance testing;

WHEREAS, the staff has also proposed amendments to Title 13, CCR, sections 2111-2140, which set forth procedures for in-use vehicle voluntary and influenced recalls and ordered recalls, and test procedures for in-use vehicle enforcement;

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

WHEREAS, pursuant to section 43013(e) of the Health and Safety Code, the Board has considered the effects of the proposed standards on the economy of the state;

WHEREAS, section 209(e) of the Federal Clean Air Act (CAA), as amended in 1990, requires that the ARB receive authorization from the Administrator of the Environmental Protection Agency (EPA) to adopt and enforce standards relating to the control of emissions from nonroad engines or vehicles;

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

WHEREAS, the Board finds that:

Despite advances in reducing emissions from motor vehicles, California still has the most severe air pollution problems in the United States;

It is now necessary, because of these serious pollution problems, to attempt to achieve emissions reductions from sources such as off-highway recreational vehicles and engines used in such vehicles, which have previously been unregulated;

The proposed regulations in Title 13, CCR, sections 2410-2414 and the documents incorporated therein and the proposed amendments to sections 2111-2140 are necessary, cost-effective, and technologically feasible to carry out the purposes of the California Clean Air Act;

The proposed regulations in Title 13, CCR, sections 2410-2414 and the proposed amendments to sections 2111-2140 will result in emissions reductions that will help attain and maintain national and state air quality standards for ozone, carbon monoxide and nitrogen dioxide;

In authorizing the Board to adopt regulations for off-highway recreational vehicles and engines, the Legislature intended such regulations to be fully enforceable; and

The proposed regulations and procedures for emission control, labels, warranties, recall, and other enforcement procedures, are necessary to adequately enforce regulations establishing emission standards and test procedures that will reduce emissions from off-highway recreational vehicles and engines used in such vehcicles and will in and of themselves help to reduce emissions from such sources.

WHEREAS, the Board, based on the following findings, has determined, in accordance with the California Environmental Quality Act and Board regulations, that although the proposed regulations in Title 13, CCR, section 2410-2414, may have some adverse environmental impacts, overriding considerations exist for adoption of the proposed regulations:

Although the proposed regulations may result in an increase of 0.05 tons per day of oxides of nitrogen (NOx), this must be weighed against the combined emission reductions of hydrocarbons (HC) and carbon monoxide (CO) of between 34 and 100 tons per day that will be achieved through implementation of the regulations as proposed.

The proposed regulations will reduce ozone precursors (HC and NOx combined) by approximately 38 tons per day by 2010.

To eliminate the potential increase in NOx from the proposed regulations while achieving the proposed reductions in HC and CO, manufacturers would be forced to incorporate expensive after-treatment technologies that would not be cost-effective for the reductions that would be achieved.

No alternative control measures have been identified that would be cost-effective and technologically feasible.

WHEREAS, the Board has determined, in accordance with the California Environmental Quality Act and Board regulations, that the proposed amendments to Title 13, CCR, sections 2111-2140 will not have significant adverse environmental impacts; and

WHEREAS, the reporting requirements of Title 13, CCR, sections 2410-2414 and sections 2111-2140, and the incorporated documents and procedures incorporated therein which apply to small businesses are necessary for the health, safety, and welfare of the people of the state;

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves for adoption the proposed regulations in Title 13, CCR, sections 2410-2414 and the test procedures and other requirements incorporated therein as amended at the hearing, and the proposed amendments to Title 13, CCR, sections 2111-2140 (see Attachments 1 through 3 attached hereto);

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to adopt Title 13, CCR, sections 2410-2414 and the test procedures and other requirements incorporated therein, and the proposed amendments to Title 13, CCR, sections 2111-2140 after making substantive modifications to the text available to the public for a period of 15 days provided that the

Executive Officer shall consider such written comments as may be submitted during this period, shall make modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if he determines that this is warranted.

BE IT FURTHER RESOLVED that the Board hereby determines that the proposed regulations and amendments to regulations approved for adoption herein will not cause the California emission standards, in the aggregate, to be less protective of public health and welfare than applicable federal standards; that California needs such standards to meet compelling and extraordinary conditions within the State; that the standards and accompanying enforcement procedures are not inconsistent with the Federal Clean Air Act, as amended.

BE IT FURTHER RESOLVED that the Executive Officer shall forward the regulations and amendments to regulations approved for adoption herein to the Administrator of EPA with a request that California be given authorization to adopt and enforce such provisions.

I hereby certify that the above is a true and correct copy of Resolution 94-1, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

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State of California
AIR RESOURCES BOARD

Executive Order G6-94-064

WHEREAS, on January 13, 1994, the Air Resources Board (the "Board") conducted a public hearing to consider the proposed adoption and amendments of regulations regarding emission control regulations for off-highway recreational vehicles and engines;

WHEREAS, following the public hearing, the Board adopted Resolution 94-1, in which the Board approved adoption of Title 13, California Code of Regulations (CCR), sections 2410-2414 and the incorporated test procedures, and amendment to sections 2111-2140 and the documents incorporated by reference, as set forth in Attachment A thereto;

WHEREAS, Resolution 94-1 directed the Executive Officer to adopt and amend the regulations set forth in Attachment A, after making them available to the public for a period of 15 days, provided that the Executive Officer shall consider such written comments as may be submitted during this period, shall make such modifications as may be appropriate in light of the comments received, and shall present the amendments to the Board for further consideration if he determines that this is warranted;

WHEREAS, the approved amendments were made available for public comment for a period of 30 days, with the changes to the originally proposed text clearly indicated in accordance with the provisions of Title 1, CCR, section 44; and

WHEREAS, the written comments received during the 30-day comment period have been considered by the Executive Officer and do not require modification nor reconsideration by the Board of the approved regulations.

NOW, THEREFORE, IT IS ORDERED that the recitals and findings contained in Resolution 94-1 are incorporated herein.

IT IS FURTHER ORDERED, in accordance with Resolution 94-1, that Title 13, CCR, sections 2410-2414 and the incorporated test procedure are hereby adopted, and sections 2111-2140 and the documents incorporated by reference are hereby amended as set forth in Attachment A hereto.

Executed this 22nd day of November, 1994, at Sacramento, California.

James D. Boyd
Executive Officer

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State of California

AIR RESOURCES BOARD

Resolution 94-2
January 13, 1994

Agenda Item No. 94-1-3

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, an interagency research proposal, Number 2120-179, entitled "Development of Methods and Analysis for Three Pesticides Sampled from the Air," has been submitted by the University of California, Davis; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2120-179, entitled "Development of Methods and Analysis for Three Pesticides Sampled from the Air," submitted by the University of California, Davis, for a total amount not to exceed $74,999.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2120-179, entitled "Development of Methods and Analysis for Three Pesticides Sampled from the Air," submitted by the University of California, Davis, for a total amount not to exceed $74,999.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $74,999.

I hereby certify that the above is a true and correct copy of Resolution 94-2, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-3
January 13, 1994

Agenda Item No. 94-1-3

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, an interagency research proposal, Number 2100-178R, entitled "Lifetimes and Fates of Toxic Air Contaminants in California's Atmosphere," has been submitted by the University of California, Riverside; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2100-178R, entitled "Lifetimes and Fates of Toxic Air Contaminants in California's Atmosphere," submitted by the University of California, Riverside, for a total amount not to exceed $74,945.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2100-178R, entitled "Lifetimes and Fates of Toxic Air Contaminants in California's Atmosphere," submitted by the University of California, Riverside, for a total amount not to exceed $74,945.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $74,945.

I hereby certify that the above is a true and correct copy of Resolution 94-3, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-4
January 13, 1994

Agenda Item No. 94-1-3

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, an interagency research proposal, Number 2121-179, entitled "Evaluating the Effects of Parking Cash-Out (AB2109)," has been submitted by the University of California, Los Angeles; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2121-179, entitled "Evaluating the Effects of Parking Cash-Out (AB2109)," submitted by the University of California, Los Angeles, for a total amount not to exceed $73,306.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2121-179, entitled "Evaluating the Effects of Parking Cash-Out (AB2109)," submitted by the University of California, Los Angeles, for a total amount not to exceed $73,306.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $73,306.

I hereby certify that the above is a true and correct copy of Resolution 94-4, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-5
January 13, 1994

Agenda Item No. 94-1-3

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, an interagency research proposal, Number 2119-179, entitled "Impact of Improved Emissions Characterization for Nitrogen-Containing Air Pollutants," has been submitted by the University of California, Berkeley; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2119-179, entitled "Impact of Improved Emissions Characterization for Nitrogen-Containing Air Pollutants," submitted by the University of California, Berkeley, for a total amount not to exceed $47,125.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2119-179, entitled "Impact of Improved Emissions Characterization for Nitrogen-Containing Air Pollutants," submitted by the University of California, Berkeley, for a total amount not to exceed $47,125.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $47,125.

I hereby certify that the above is a true and correct copy of Resolution 94-5, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-6
January 13, 1994

Agenda Item No. 94-1-3

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39900 through 39911; and

WHEREAS, an interagency research proposal, Number 256-51, entitled "Assessing the Potential Impact of Acid Deposition on High Altitude Ecosystems in California: Integrating Ten Years of Investigations," has been submitted by the University of California, Santa Barbara; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Scientific Advisory Committee on Acid Deposition has reviewed and recommends for funding:

> Proposal Number 256-51, entitled "Assessing the Potential Impact of Acid Deposition on High Altitude Ecosystems in California: Integrating Ten Years of Investigations," submitted by the University of California, Santa Barbara, for a total amount not to exceed $60,797.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39904, hereby accepts the recommendation of the Scientific Advisory Committee on Acid Deposition and approves the following:

> Proposal Number 256-51, entitled "Assessing the Potential Impact of Acid Deposition on High Altitude Ecosystems in California: Integrating Ten Years of Investigations," submitted by the University of California, Santa Barbara, for a total amount not to exceed $60,797.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $60,797.

I hereby certify that the above is a true and correct copy of Resolution 94-6, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

STATE OF CALIFORNIA
AIR RESOURCES BOARD
2020 L STREET
P.O. BOX 2815
SACRAMENTO, CA 95812

PETE WILSON, Gover or

Notice of Decision and Response to Significant Environmental Issues

Item: PUBLIC HEARING TO CONSIDER THE ADOPTION OF AMENDMENTS TO REGULATIONS REGARDING EVAPORATIVE EMISSION STANDARDS AND TEST PROCEDURES APPLICABLE TO 1995 AND SUBSEQUENT MODEL YEAR PASSENGER CARS, LIGHT-DUTY TRUCKS, MEDUIM-DUTY VEHICLES, AND HEAVY-DUTY VEHICLES

Adopted by: Executive Order G-94-056
Signed: September 21, 1994

Approved by: Resolution 94-7

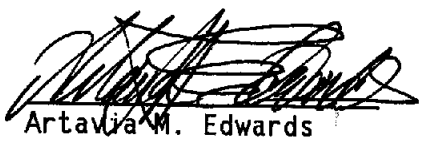
Agenda Item No.: 94-2-1

Public Hearing Date: February 10, 1994

Issuing Authority: Air Resources Board

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

Response: N/A

Certified: 
Artavia M. Edwards
Regulations Coordinator

Date: 27 Sep 94

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SEP 22 1994
RESOURCES AGENCY OF CALIFORNIA

State of California
AIR RESOURCES BOARD

Resolution 94-7

February 10, 1994

Agenda Item No.: 94-2-1

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

WHEREAS, in section 43000 of the Health and Safety Code, the Legislature has declared that the emission of air pollutants from motor vehicles is the primary cause of air pollution in many parts of the State and, in sections 39002 and 39003 of the Health and Safety Code, has charged the Board with the responsibility for systematically attacking the serious air pollution problem caused by motor vehicles;

WHEREAS, sections 43013, 43101, and 43104 of the Health and Safety Code authorize the Board to adopt emission standards and test procedures to control air pollution caused by motor vehicles;

WHEREAS, section 43018 of the Health and Safety Code directs the Board to endeavor to achieve the maximum degree of emission reduction from vehicular sources to accomplish the attainment of state ambient air quality standards by the earliest practicable date, and to take whatever actions are necessary, cost-effective and technologically feasible to achieve a reduction in emissions of reactive organic gases (hydrocarbons) of at least 55 percent from motor vehicles (based on emissions in 1987) by December 31, 2000;

WHEREAS, section 39667 of the Health and Safety Code directs the Board to consider the revision of emission standards for vehicular sources to achieve the maximum possible reduction in public exposure to toxic air contaminants and provides that standards for new motor vehicles shall be based on the most advanced technology feasible;

WHEREAS, following a hearing in November 1990, the Board adopted enhanced evaporative emissions regulatory requirements designed to ensure control of evaporative emissions under virtually all in-use conditions; these requirements are contained in Title 13, California Code of Regulations, section 1976 and the incorporated California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles;

WHEREAS, in March 1993, the United States Environmental Protection Agency (U.S. EPA) adopted enhanced evaporative emissions regulations similar to the aforementioned California regulations except for minor technical changes and the addition of a supplemental standard and test procedure;

WHEREAS, the U.S. EPA adopted the supplemental test procedure to ensure evaporative emissions are properly controlled during short trips;

WHEREAS, the staff has proposed the incorporation of the supplemental test as part of the California evaporative emissions certification requirements, starting in the 1996 model year;

WHEREAS, the staff has initially proposed the following two-day diurnal plus hot soak emission standards for the supplemental test:

(1) 2.5 grams/test for: Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles (6,001 - 8,500 lbs. GVWR)
(2) 3.5 grams/test for: Medium-Duty Vehicles (8,501 - 14,000 lbs. GVWR)
(3) 4.5 grams/test for: Heavy-Duty Vehicles (over 14,000 lbs. GVWR)

WHEREAS, the medium-duty vehicle class from 8,501 to 14,000 pounds gross vehicle weight is the only vehicle class that is not currently required to comply with the enhanced test procedures;

WHEREAS, the staff has proposed that the complete medium-duty vehicles from 8,501 to 14,000 pounds gross vehicle weight comply with the proposed enhanced evaporative emission test procedures beginning in the 1996 model year;

WHEREAS, the staff has proposed that the complete medium-duty vehicles from 8,501 to 14,000 pounds gross vehicle weight comply with a slightly relaxed three-day diurnal plus hot soak standard of 3.0 grams per test, because of lhe limited lead time and to be consistent with the federal requirements;

WHEREAS, the staff has proposed technical modifications to the California enhanced evaporative emissions test procedures, applicable for the 1996 and subsequent model years, to more closely align them with the federal test procedures;

WHEREAS, the staff has also proposed technical changes to the enhanced evaporative emission test procedures, applicable for the 1995 and subsequent model years, to allow manufacturers to conduct tests more efficiently;

WHEREAS, the staff's initial proposal would be effected by amendments to Title 13, California Code of Regulations, section 1976 as set forth in Attachment A hereto; and amendments to the California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles, as set forth in Attachment B hereto;

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

WHEREAS, the Board has considered the impact of the proposed regulatory action on the economy of the state;

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

WHEREAS, the Board finds that:

The proposed supplemental standards and test procedure are technologically feasible and are necessary to ensure that in those incidences of short vehicle operation, the vehicle's evaporative emissions control system will function properly to control evaporative emissions;

Aligning the California evaporative emission test procedures more closely with the federal test procedures will provide industry with more consistent procedures and will facilitate evaporative emissions tests which fulfill both California and federal requirements;

It is technologically feasible for complete medium-duty vehicles from 8,501 to 14,000 pounds gross vehicle weight to comply with the enhanced test procedures and standards as approved herein;

The addition of the supplemental test, the amendments to more closely align with the federal procedures, and the requirement for complete medium-duty vehicles from 8,501 to 14,000 pounds gross vehicle weight to comply with the enhanced test procedures are technologically feasible beginning in the 1996 model year;

The technical amendments to the test procedures approved herein are necessary and appropriate to add specificity, enhance clarity, and facilitate implementation of the test procedure requirements;

The modification approved herein to revise the three-day diurnal plus hot soak standard from 2.0 to 2.5 grams per test for a special class of medium-duty vehicles from 6,001 to 8,500 pounds gross vehicle weight with fuel tanks of at least 30 gallons is necessary and appropriate to assure the standards are technologically

feasible for such vehicles, and is consistent with the federal standards;

The modification approved herein to revise the proposed supplemental test standard from 2.5 to 3.0 grams per test for medium-duty vehicles from 6,001 to 8,500 pounds gross vehicle weight with fuel tanks of at least 30 gallons is necessary and appropriate to assure the standards are technologically feasible for such vehicles, and is consistent with the federal standards;

The amendments approved herein represent a cost-effective means of reducing emissions of hydrocarbons;

The regulations establishing the California evaporative emissions standards and test procedures as approved herein differ from comparable regulations in the Code of Federal Regulations, and the differing state regulations are authorized by sections 43013, 43018, 43101 and 43104 of the Health and Safety Code; and

WHEREAS, the Board further finds that:

The modification approved herein which revises the three-day diurnal plus hot soak standard from 2.0 to 2.5 grams per test for medium-duty vehicles from 6,001 to 8,500 pounds gross vehicle weight with fuel tanks of at least 30 gallons will result in an increase in statewide volatile organic compound (VOC) emissions of approximately 1 ton per day in the year 2010;

The VOC emissions increase identified above will be mitigated by the decrease of approximately 4 tons per day in year 2010 statewide VOC emissions which will result from the amendments approved herein making complete medium-duty vehicles from 8,501 to 14,000 pounds gross vehicle weight subject to the enhanced test procedures;

In all other respects, the amendments approved herein will not have any significant adverse effect on the environment.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves the amendments to section 1976, Title 13, California Code of Regulations, and the document incorporated therein, as set forth in Attachments A and B hereto, with the modifications described in Attachment C hereto.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to incorporate into the approved amendments the modifications described in

Attachment C hereto with such other conforming modifications as may be appropriate, and to adopt the amendments approved herein, after making the modified regulatory language available for public comment for a period of 15 days, provided that the Executive Officer shall consider such written comments regarding the modifications as may be submitted during this period, shall make modifications after comments have been received, and shall present the regulations to the Board for further consideration if he determines that this is warranted.

BE IT FURTHER RESOLVED that the Board hereby determines that the regulatory amendments approved herein will not cause California motor vehicle emission standards, in the aggregate, to be less protective of public health and welfare than applicable federal standards.

BE IT FURTHER RESOLVED that the Board hereby finds that separate California emission standards and test procedures are necessary to meet compelling and extraordinary conditions.

BE IT FURTHER RESOLVED that the Board finds that the California motor vehicle emission standards and test procedures as amended herein will not cause the California requirements to be inconsistent with section 202(a) of the Clean Air Act and raise no new issues affecting previous waiver determinations of the Administrator of the Environmental Protection Agency pursuant to section 209(b) of the Clean Air Act.

BE IT FURTHER RESOLVED that the Executive Officer shall, upon adoption, forward the regulations to the Environmental Protection Agency with a request for a waiver or confirmation that the regulations are within the scope of an existing waiver of federal preemption pursuant to section 209(b) of the Clean Air Act, as appropriate.

I hereby certify that the above is a true and correct copy of Resolution 94-7, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

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NOV 22 1994
RESOURCES AGENCY OF CALIFORNIA

State of California
AIR RESOURCES BOARD

Executive Order G-94-56

WHEREAS, on February 10, 1994, the Air Resources Board (ARB) conducted a public hearing to consider the adoption of amendments to regulations regarding evaporative emission standards and test procedures applicable to 1995 and subsequent model-year passenger cars, light-duty trucks, medium-duty vehicles and heavy-duty vehicles;

WHEREAS, following the public hearing on February 10, 1994, the Board adopted Resolution 94-7, in which the Board approved the amendments to section 1976 of Title 13, California Code of Regulations, and the incorporated California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles, as set forth in Attachments A and B thereto, with the modifications set forth in Attachment C thereto;

WHEREAS, Resolution 94-7 directed the Executive Officer to adopt the regulations and incorporated document as set forth in Attachments A and B thereto with the modifications set forth in Attachment C thereto and with such other conforming modifications as may be appropriate, after making the modified regulatory language available to the public for a supplemental written comment period of 15 days, provided that the Executive Officer shall consider such written comments regarding the modifications as may be submitted during this period, shall make modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if he determines that this is warranted;

WHEREAS, the text of section 1976, Title 13, California Code of Regulations, and the incorporated California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles, was made available to the public for a 15-day comment period, in accordance with the provisions of Title 1, CCR, section 44, with the Board-approved and conforming modifications to the originally proposed text clearly indicated;

WHEREAS, one written comment was received during the 15-day comment period, and that comment has been considered by the Executive Officer and does not require substantive modification nor reconsideration by the Board of the approved regulations, and the incorporated California test procedures; and

WHEREAS, Attachments A and B hereto contain the text of section 1976, Title 13, California Code of Regulations, and the incorporated California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles, as made available for the 15-day comment period, with additional nonsubstantial modifications made to the incorporated document in response to the comment received during the 15-day comment period.

NOW, THEREFORE, IT IS ORDERED that the recitals and findings contained in Resolution 94-7 are incorporated herein.

IT IS FURTHER ORDERED, in accordance with Resolution 94-7 and Health and Safety Code sections 39515 and 39516, that the amendments to section 1976, Title 13, California Code of Regulations, and the incorporated California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles, are hereby adopted as set forth in Attachments A and B hereto.

Executed this 21st day of September, 1994, at Sacramento, California.

James D. Boyd
Executive Officer

Attachments

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RESOURCES AGENCY OF CALIFORNIA

Resolution 94-7

February 10, 1994

Identification of Attachments to the Resolution

Attachment A: Amendments to Title 13, California Code of Regulations, section 1976, as appended to the Staff Report released December 23, 1993.

Attachment B: Amendments to the California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles, as made available by the ARB's Mobile Source Division December 23, 1993.

Attachment C: Staff's Suggested Changes to the Original Proposal, distributed at the February 10, 1994 hearing.

ATTACHMENT C

SUGGESTED MODIFICATIONS TO TITLE 13

Except as otherwise indicated, the text of the originally proposed amendments is shown below in underline to indicate additions and ~~strikeout~~ to show deletions. The modifications now proposed by staff are shown in ***bold italics*** to show additions and ~~***bold italics***~~ to show deletions.

1976. Standards and Test Procedures for Motor Vehicle Fuel Evaporative Emissions.

(a) Fuel evaporative emissions from 1970 through 1977 model passenger cars and light-duty trucks are set forth in Title 40, Code of Federal Regulations, Part 86, Subparts A and C, as it existed on June 20, 1973. These standards are enforced in California pursuant to section 43008 of the Health and Safety Code.

(b)(1) Evaporative emissions for 1978 and subsequent model gasoline-fueled, 1983 and subsequent model liquefied petroleum gas-fueled, and 1993 and subsequent model alcohol-fueled motor vehicles and hybrid electric vehicles subject to exhaust emission standards under this article, except petroleum-fueled diesel vehicles, ***compressed natural gas-fueled vehicles,*** hybrid electric vehicles that have sealed fuel systems which can be demonstrated to have no evaporative emissions, and motorcycles, shall not exceed~~:~~ the following standards.

(A) For vehicles identified below, tested in accordance with the test procedure based on the Sealed Housing for Evaporative Determination as set forth in Title 40, Code of Federal Regulations, sections 86.130-78 through 86.143-90 as they existed July 1, 1989, the evaporative emission standards are:

Vehicle Type	Model Year	~~Hydrocarbons or OMHCE (1) Hot Soak + Diurnal (grams per test) 50K Useful Life (2)~~ / Hydrocarbons (1) Diurnal + Hot Soak (grams/test) 50K miles	~~Hydrocarbons or OMHCE (1) Running Loss (grams/mile) Useful life(2)~~
Passenger cars	1978 and 1979	6.0	
Light-duty trucks		6.0	
Medium-duty vehicles		6.0	
Heavy-duty vehicles		6.0	
Passenger cars	1980 - 1994 (2)	2.0	
Light-duty trucks		2.0	
Medium-duty vehicles		2.0	
Heavy-duty vehicles		2.0	

(1) Organic Material Hydrocarbon Equivalent, for alcohol-fueled vehicles.

(2) Other than hybrid electric vehicles.

(B) For the vehicles identified below, tested in accordance with the test procedure which includes the running loss test, the hot soak test, and the 72 hour diurnal test, the evaporative emission standards are:

Vehicle Type	Model Year	Hydrocarbons (1) Three-Day Diurnal + Hot Soak (grams/test) Useful Life(2)	Hydrocarbons (1) Running Loss (grams/mile) Useful Life(2)
Passenger cars	1995 and subsequent (3)	2.0	0.05
Light-duty trucks		2.0	0.05
Medium-duty vehicles (6,000-8,500 lbs. GVWR)			
with fuel tanks < 30 gallons		2.0	0.05
with fuel tanks ≥ 30 gallons		***2.5***	***0.05***
(8,501-14,000 lbs. GVWR) (4)		3.0	0.05
Heavy-duty vehicles (over 14,000 lbs. GVWR)		2.0	0.05
Hybrid Electric Passenger Cars	1993 and subsequent (5)	2.0	0.05
Hybrid Electric Light-Duty Trucks		2.0	0.05
Hybrid Electric Medium-Duty Vehicles		2.0	0.05

(1) ~~Organic Material Hydrocarbon Equivalent,~~ ***~~Total Hydrocarbon plus the Hydrocarbon component of alcohol~~ Organic Material Hydrocarbon Equivalent*** for alcohol-fueled vehicles.

(2) For purposes of this section, "useful life" shall have the same meaning as provided in section 2112, Title 13, California Code of Regulations. Approval of vehicles which are not exhaust emission tested using a chassis dynamometer pursuant to section 1960.1, Title 13, California Code of Regulations shall be based on an engineering evaluation of the system and data submitted by the applicant. The useful life of incomplete medium-duty vehicles certified to the "California Exhaust Emission Standards and Test Procedures for 1987 and Subsequent Model Heavy-Duty Otto-Cycle Engines and Vehicles" shall be defined by the useful life of the medium-duty vehicle engine used in such vehicles.

(3) The running loss and useful life three-day diurnal plus hot soak evaporative emission standards (hereinafter "running loss and useful life standards") shall be phased-in beginning with the 1995 model year. Each manufacturer, except small volume manufacturers, shall certify the specified percent (a) of passenger cars and (b) of light-duty trucks, medium-duty vehicles and heavy-duty vehicles to the running loss and useful life ~~evaporative emission~~ standards according to the following schedule:

Model Year	*~~Number~~ Minimum Percentage of Vehicles Certified to Running Loss and Useful Life Standards**
1995	10 percent
1996	30 percent
1997	50 percent

* The ~~number~~ minimum percentage of motor vehicles of each vehicle type required to be certified to the running loss and useful life standards shall be based on ~~determined by applying the specified percentage to~~ the manufacturer's projected California model-year sales (a) of passenger cars and (b) of light-duty trucks, medium-duty vehicles and heavy-duty vehicles. Optionally, the percentage of motor vehicles can also be based on the manufacturer's projected California model-year sales (a) of passenger cars and light-duty trucks and (b) of medium-duty vehicles and heavy-duty vehicles.

Beginning with the 1998 model year, all motor vehicles subject to the running loss and useful life standards, including those produced by small volume manufacturers, shall be certified to the specified standards.

All 1995 through 1997 model year motor vehicles which are not subject to running loss and useful life standards pursuant to the phase-in schedule shall comply with the 50,000-mile standards in effect for 1980 through 1994 model-year vehicles.

(4) For the 1995 model year only, the evaporative emission standards for complete vehicles in this weight range shall be 2.0 grams/test and Gcompliance with the evaporative emission standards ~~for complete vehicles in this weight range~~ shall be based on the ~~Sealed Housing for Evaporative Determination (SHED)~~ conducted in accordance with the procedures set forth in Title 40, Code of Federal Regulations, sections 86.130-78 through 86.143-90 as they existed July 1, 1989.

(5) The running loss and useful life ~~diurnal plus hot soak evaporative emission~~ standards ~~(hereinafter "running loss and useful life standards")~~ for all hybrid electric vehicles shall be effective in the 1993 and subsequent model years.

(C) For vehicles identified below, tested in accordance with the test procedure which includes the hot soak test and the 48 hour diurnal test, the evaporative emission standards are:

Vehicle Type	*Model Year*	*Hydrocarbon (1) Two-Day Diurnal + Hot Soak (grams/test) Useful Life(2)*
Passenger cars	1996 and	2.5
Light-duty trucks	subsequent (3)	2.5
Medium-duty vehicles (6,000 - 8,500 lbs. GVWR)		
with fuel tanks < 30 gallons		*2.5*
with fuel tanks ≥ 30 gallons		***3.0***
(8,501 - 14,000 lbs. GVWR)		3.5
Heavy-duty vehicles (over 14,000 lbs. GVWR)		4.5
Hybrid electric passenger cars	1996 and	2.5
Hybrid electric light-duty trucks	subsequent (3)	2.5
Hybrid electric medium-duty vehicles		2.5

(1) ~~*Total Hydrocarbon plus the hydrocarbon component of alcohol*~~ ***Organic Material Hydrocarbon Equivalent*** for alcohol-fueled vehicles.

(2) For purposes of this paragraph, "useful life" shall have the same meaning as provided in section 2112, Title 13, California Code of Regulations. Approval of vehicles which are not exhaust emission tested using a chassis dynamometer pursuant to section 1960.1, Title 13, California Code of Regulations shall be based on an engineering evaluation of the system and data submitted by the applicant. The useful life of incomplete medium-duty vehicles

certified to the "California Exhaust Emission Standards and Test Procedures for 1987 and Subsequent Model Heavy-Duty Otto-Cycle Engines and Vehicles" shall be defined by the useful life of the medium-duty vehicle engine used in such vehicles.

(3) The two-day diurnal plus hot soak evaporative emission standards (hereinafter "supplemental standards") shall be phased-in beginning with the 1996 model year. Those vehicles certified under the running loss and useful life standards for the 1996 and subsequent model years must also be certified under the supplemental standards.

(2) Evaporative emissions for gasoline-fueled motorcycles subject to exhaust emission standards under this article shall not exceed:

Motorcycle Class	*Model Year*	*Hydrocarbons (grams per test)*
Class I and II (50-279cc)	1983 and 1984	6.0
	1985 and subsequent	2.0
Class III (280cc and larger)	1984 and 1985	6.0
	1986 and subsequent	2.0
Class III (280cc and larger) (Optional Standard for Small-Volume ***Motorcycle*** Manufacturers)	1986-1988	6.0

(c) The procedure for determining compliance with the standards in subsection (b) above is set forth in "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles," adopted by the state board on April 16, 1975, as last amended ~~November 20, 1991, effective January 16, 1992,~~ _____.

(d) Motorcycle engine families certified to 0.2 grams per test or more below the applicable standards shall be exempted from the state board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" pursuant to section 2290, Title 13, California Code of Regulations.

(e) Small volume motorcycle manufacturers electing to certify 1986, 1987, or 1988 model-year Class III motorcycles in accordance with the optional 6.0 gram per test evaporative emission standard shall submit, with the certification application, a list of the motorcycle models for which it intends to seek California certification and estimate sales data for such models. In addition, each such manufacturer shall, on or before July 1 of each year in which it certifies motorcycles under the optional standard, submit a report describing its efforts and progress toward meeting the more stringent evaporative emission standards. The report shall also contain a description of the manufacturer's current hydrocarbon evaporative emission control development status, along with supporting test data, and shall summarize future planned development work.

SUGGESTED MODIFICATIONS TO THE
CALIFORNIA EVAPORATIVE EMISSION STANDARDS AND
TEST PROCEDURES FOR 1978 AND SUBSEQUENT MODEL MOTOR VEHICLES

Except as otherwise indicated, the text of the originally proposed amendments is shown below in underline to indicate additions and ~~strikeout~~ to show deletions. The modifications now proposed by staff are shown in ***bold italics*** to show additions and ~~***bold italics***~~ to show deletions.

1. Include a two-day diurnal plus hot soak standard and a three-day diurnal plus hot soak standard for medium-duty vehicles from 6,001 to 8,500 lbs. GVWR with fuel tanks of at least 30 gallons. Sections affected: paragraph 1.a.ii. and paragraph 1.a.iii.

ii . . .

Class of Vehicle	*Model Year*	*Hydrocarbons (1) Three-Day Diurnal + Hot Soak (grams/test) Useful Life(2)*	*Running Loss (grams/mile) Useful life(2)*
Passenger Cars	1995 and	2.0	0.05
Light-Duty Trucks	subsequent (3)	2.0	0.05
Medium-Duty Vehicles (6,000*1* - 8,500 lbs. GVWR)			
with fuel tanks < 30 gallons		2.0	0.05
with fuel tanks > 30 gallons		***2.5***	***0.05***
(8,501 - 14,000 lbs. GVWR) (4)		2.0	0.05
Heavy-Duty Vehicles (over 14,000 lbs. GVWR)		2.0	0.05

iii . . .

Class of Vehicle	*Model Year*	*Hydrocarbons (1) Two-Day Diurnal + Hot Soak (grams/test) Useful Life(2)*
Passenger Cars	1996 and	2.5
Light-Duty Trucks	subsequent (3)	2.5
Medium-Duty Vehicles (6,000*1* - 8,500 lbs. GVWR)		
with fuel tanks < 30 gallons		2.5
with fuel tanks > 30 gallons		***3.0***
(8,501 - 14,000 lbs. GVWR)		3.5
Heavy-Duty Vehicles (over 14,000 lbs. GVWR)		4.5

2. Clarify the three-day diurnal plus hot soak standard for incomplete medium-duty vehicles from 8,501 to 14,000 pounds gross vehicle rate that are required to comply with the enhanced test procedures. Section affected: paragraph 1.a.ii.(4)

(4) For the 1995 model year only, the evaporative emission standard for complete vehicles in this weight range shall be 2.0 grams/test and Gcompliance with the evaporative emission standards ~~for complete vehicles in this weight range~~ shall be based on the ~~Sealed Housing for Evaporative Determination~~ (SHED) conducted in accordance with the procedures set forth in Title 40, Code of Federal Regulations, sections 86.130-78 through 86.143-90 as they existed July 1, 1989. ***For 1995 and subsequent model years, the evaporative emission diurnal plus hot soak standard for incomplete vehicles in this weight range shall be 2.0 grams/test.***

3. Clarify the statement which exempts motor vehicles from the standards and test procedures to include compressed natural-gas vehicles. This exemption for compressed natural-gas vehicles was inadvertently left out of the test procedures. Section affected: paragraph 1.

1 . . . These standards and test procedures do not apply to motor vehicles which are exempt from exhaust emission certification, ~~or~~ petroleum-fueled diesel vehicles, ***compressed natural gas-fueled vehicles,*** or hybrid electric vehicles that have sealed fuel systems which can be demonstrated to have no evaporative emissions.

4. Modify the original proposed language to require that standards for alcohol-fueled vehicles be expressed as OMHCE. Sections affected: paragraph a.ii.(1) and paragraph a.iii(2)

(1) . . . The applicable evaporative emission standards for alcohol-fueled vehicles are expressed ~~as organic material hydrocarbon equivalent (OMHCE)~~ ***in terms of total hydrocarbon plus the hydrocarbon component of alcohol/ as OMHCE.*** ~~These evaporative standards are effective in the 1993 model year.~~

(1) . . . The applicable evaporative emission standards for alcohol vehicles are expressed ***in terms of total hydrocarbon plus the hydrocarbon component of alcohol as OMHCE.***

5. Include a definition for small volume manufacturers. Section affected: paragraph 2.

2 . . . The definitions in section 1900, Title 13, California Code of Regulations, and in the applicable model-year California exhaust emission standards and test procedures, are hereby incorporated into this test procedure by reference. ***For the purposes of this test procedure and section 1976 of Title 13, California Code of Regulations,***

"small volume manufacturer" shall mean any vehicle manufacturer with California sales less than or equal to 3000 new vehicles per model year based on the average number of vehicles sold by the manufacturer in the previous three consecutive model years.

6. Allow manufacturers to comply with the requirement to conduct evaporative emission testing of the exhaust durability data vehicle (paragraph 4.c.i. or 4.c.ii.) by conducting the evaporative durability requirements of paragraph 4.c.iii. on an on-road vehicle simulating the complete useful life and by demonstrating compliance with the evaporative emission standards with the exhaust durability data vehicle at the end of the useful life. Section affected: paragraph 4.c.

c . . . *For 1996 and subsequent model motor vehicles subject to the running loss and useful life standards, the requirements of paragraph 4.c.i. or paragraph 4.c.ii. may be met by an emissions test sequence demonstrating compliance with the applicable exhaust and evaporative standards at the end of the useful life if the paragraph 4.c.iii. procedure includes on-road, useful life deterioration on the evaporative test vehicle. The test vehicle must be deteriorated based on typical customer use through the applicable useful life. For the 1995 model year only, a manufacturer may use an engineering evaluation to satisfy the requirement for the exhaust durability data vehicle to comply with the applicable evaporative standards.*

7. Allow the manufacturers to use federal procedures for the following requirements: (1) the carry-across of three-day diurnal plus hot soak deterioration factors (DFs) to the two-day DFs; (2) the loading procedures for evaporative systems with multiple canisters, and (3) the correction factors for the running loss profile. Section affected: paragraph 4.k. (new paragraph)

k. Upon prior written approval of the Executive Officer, a manufacturer may use the comparable federal requirements in Title 40, CFR, Part 86 in lieu of the carry-across specifications of paragraph 4.c. of these test procedures, the multiple canister loading requirements of paragraph 4.g.iii.D., and the running loss road profile correction factors of paragraph 4.f.. The Executive Officer shall approve a manufacturer's request if the manufacturer demonstrates to the satisfaction of the Executive Officer that the alternative methodology will not adversely affect in-use evaporative emissions.

8. Include a calibration procedure for the hot soak enclosure. Section affected: paragraph 4.e.(e)(2)(v) (new paragraph)

(v) Hot soak enclosure. The hot soak enclosure calibration consists of the following parts: initial and periodic determination of enclosure background emissions, initial determination of enclosure volume, and periodic hydrocarbon and alcohol retention check and

calibration. The hot soak enclosure calibration shall be conducted according to the method specified in section (e)(1) with a retention check of 4 hours at 105°F or the method specified in section (e)(2)(iv).

9. Include a statement that methanol measurements will not be required during the emissions test sequence if methanol-fueled vehicles will not be tested. Section affected: paragraph 4.g.i.

i. . .<u>For 1996 and subsequent model motor vehicles, the test sequence shown in Figure 4 (Figure 5 for hybrid electric vehicles) describes the steps encountered as the vehicle undergoes the three-day diurnal sequence and the supplemental two-day diurnal sequence</u> to determine conformity with the standards set forth. ***Methanol measurements may be omitted when methanol-fueled vehicles will not be tested in the evaporative enclosure.***

10. Require the fuel tank vapor temperature to match the on-road vapor profile throughout the entire running loss test. The vapor temperature must be no more than ± 5°F of the corresponding on-road temperatures. Sections affected: paragraph 4.g.viii.A.VIII and paragraph 4.g.viii.B.IV.

VIII . . . ***Throughout the running loss test, the fuel tank vapor temperature shall agree with the corresponding vapor temperature with a tolerance of ± 5°F. A running loss test with a fuel tank vapor temperature that exceeded the corresponding vapor temperature profile by more than the + 5°F tolerance may be considered valid if test results comply with the applicable running loss evaporative emission standards.*** The fuel tank vapor temperature during the final 120 second idle period shall agree with the corresponding vapor temperature from the on-road profile within ± 3.0°F.

IV . . . ***Throughout the running loss test, the fuel tank vapor temperature shall agree with the corresponding vapor temperature with a tolerance of ± 5°F. A running loss test with a fuel tank vapor temperature that exceeded the corresponding vapor temperature profile by more than the + 5°F tolerance may be considered valid if test results comply with the applicable running loss evaporative emission standards.*** The fuel tank vapor temperature during the final 120 second idle period shall agree with the corresponding vapor temperature from the on-road profile within ± 3.0°F.

11. Allow transitory pressure events that exceed the 10 inches of water requirements during the running loss test if they do not cause the

pressure to exceed 10 inches of water during in-use. Section affected: paragraph 4.g.viii.A.X. and paragraph 4.g.viii.B.V.

X. Tank pressure shall not exceed 10 inches of water ~~at any time~~ 30 seconds after the start of the engine until the end of engine operation during the running loss test unless a pressurized system is used and the manufacturer demonstrates in a separate test that vapor would not be vented to the atmosphere if the fuel cap was removed at the end of the test. ***Transitory incidents of the pressure exceeding 10 inches of water shall be acceptable during the running loss test if the manufacturer can demonstrate that the tank pressure does not exceed 10 inches of water during in-use operation.***

V. Tank pressure shall not exceed 10 inches of water 30 seconds after the start of the engine until the end of engine operation during the running loss test unless a pressurized system is used and the manufacturer demonstrates in a separate test that vapor would not be vented to the atmosphere if the fuel cap was removed at the end of the test. ***Transitory incidents of the pressure exceeding 10 inches of water shall be acceptable during the running loss test if the manufacturer can demonstrate that the tank pressure does not exceed 10 inches of water during in-use operation.***

12. Allow up to six hours to stabilize the fuel liquid and vapor temperatures to 105°F before the running loss test. Also specify the maximum rate of heating the fuel tank. Section affected: paragraph 4.g.vii.

vii. Immediately after the hot transient exhaust emission test, the vehicle shall be soaked in a temperature controlled area ***for a between one hour to maximum of one hour four hours six hours,*** until the fuel ***and vapor*** temperatures ***are is*** stabilized at 105 ***F*** ***± 3 F°for one hour. The vehicle fuel temperature stabilization step may be omitted on vehicles whose tank fuel and vapor temperatures are already at 105°F ± 3°F upon the completion of the exhaust emission test.***

13. Modify the cold soak period preceding the vehicle preconditioning to a minimum of 6 hours. Also eliminate the initial fuel drain and fill and vehicle soak for vehicles performing consecutive tests with the same fuel specifications. Section affected: paragraph 4.g.i.B.

B. The vehicle preconditioning drive shall be performed in accordance with 40 CFR 86.132/90, except that following the vehicle fueling step at §86.132-90(a)(1) a ***minimum*** soak period of ***12 to 36 6*** hours shall be provided to allow the vehicle to stabilize to ambient temperature prior to the preconditioning drive. ***Vehicles performing***

State of California
AIR RESOURCES BOARD

Resolution 94-8

WHEREAS, Betty S. Ichikawa has served as the agricultural expert on the Air Resources Board (ARB) since 1983;

WHEREAS, during her tenure, Betty ably and tenaciously represented the interests of California's vast farming community to ensure that growers were treated fairly while contributing their fair share to cleaning up pollution;

WHEREAS, Betty's experience and understanding of both air polution and agriculture provided the Board with a fuller understanding of how to maximize emission reductions while minimizing regulatory impacts;

WHEREAS, Betty participated on several Board committees which oversaw efforts to identify and quantify crop damage caused by ozone and contributed to the Board's knowledge of this subject as well as to its taste for fresh vegetables;

WHEREAS, Betty's generous and effervescent personality and down-to-earth style gained her many friends at the ARB and served her well in a wide range of human interaction, from listening to constituents, to adding life to Basque dinners in Bakersfield, Chinese feasts in Los Angeles, and her own excellent Mexican dinners;

WHEREAS, Betty served as a valuable liaison with the agricultural community to ensure an open and useful dialogue;

WHEREAS, Betty's participation on the Board was always well informed and thoroughly considered;

WHEREAS, Betty Ichikawa is leaving the Board, but will continue to lend her efforts to the benefit of agriculture.

NOW, THEREFORE, BE IT RESOLVED that the Board will miss Betty and expresses its deep appreciation for her cheerful and unflagging efforts to clean air over the years and wishes that she continue to flower as the owner of a small business in Marina.

Jacqueline E. Schafer, Chairwoman

Brian P. Bilbray, Member

John S. Lagarias, Member

Eugene A. Boston, M.D., Member

Jack C. Parnell, Member

Joseph C. Calhoun, Member

Barbara Riordan, Member

Lynn Edgerton, Member

Douglas E. Vagim, Member

M. Patricia Hilligoss, Member

Harriett M. Wieder, Member

State of California
AIR RESOURCES BOARD
Resolution 94-9

WHEREAS, Jananne Sharpless served as both Chairwoman of the Air Resources Board from 1985 to 1993 and Secretary for Environmental Affairs from 1985 to 1991;

WHEREAS, Jan presided over the ARB during a period of spectacular achievement, racing down the superhighway to clean air with ultra-clean cars, clean-burning fuels, less-polluting consumer products, greater controls on toxic air contaminants, a new California Clean Air Act, and market-based approaches to the implementation of state and federal clean air statutes;

WHEREAS, Jan successfully steered the course of LEVs, ULEVs, TLEVs and ZEVs to assure California the world's cleanest cars and to give the state's fledgling clean vehicle manufacturing industry its first driver's license;

WHEREAS, Jan's unstinting courage and adherence to principles born of sound science have yielded the benefits of clean reformulated fuels for California's new vehicle fleets;

WHEREAS, her boundless energy, inexhaustible patience, innate fairness, and unflagging sense of mission enabled her to master the technical complexities necessary for melding sound science with sound policy;

WHEREAS, Jan's attentive perseverance and incisive questioning through hours of testimony enabled her to guide the Board toward creative solutions which maximized air quality benefits and minimized animosity;

WHEREAS, Jan's contributions in the drafting of the federal Clean Air Act Amendments of 1990 and the California Clean Air Act have affected the lives of all Californians and have established innovative clean air policies for years to come;

WHEREAS, Jan's personal warmth, encouragement and support of ARB staff and unflinching integrity have inspired the trust, respect, and devotion of the Board, the staff and the State's Air Pollution Control Districts;

WHEREAS, in celebration of Jan's superior accomplishments toward creating a cleaner California and her nurturing of the ARB's worldwide leadership role in air quality;

NOW, THEREFORE, BE IT RESOLVED that the Board, on behalf of itself and ARB staff, commends Jananne Sharpless for her stunning clean air performance, her impeccable leadership over eight busy years, and her enduring contribution to environmental quality for all California's citizens.

BE IT FURTHER RESOLVED that although the ARB will greatly miss Jan's presence, her legacy will continue as we move forward with what she has initiated.

Jacqueline E. Schafer, Chairwoman

Brian P. Bilbray, Member

Barbara Riordan, Member

Eugene A. Boston, M.D., Member

Harriett M. Wieder, Member

Lynn Edgerton, Member

Joseph C. Calhoun, Member

John S. Lagarias, Member

M. Patricia Hilligoss, Member

Douglas E. Vagim, Member

Jack C. Parnell, Member

State of California
AIR RESOURCES BOARD

Resolution 94-10

WHEREAS, Andrew Wortman, Ph.D., has served as the automotive engineering expert on the Air Resources Board (ARB) since 1983;

WHEREAS, during his tenure, Andrew tenaciously represented the interests of California's research, environmental, and health communities;

WHEREAS, Andrew worked to ensure that the most accurate, complete, and relevant science was used as the basis for California's air quality management program;

WHEREAS, Andrew's experience and understanding of both the scientific process and air pollution provided the Board with a broader understanding of the relationship between science and policy;

WHEREAS, Andrew participated on several Board committees which oversaw ARB research and control strategies, and contributed to the Board's knowledge of these subjects;

WHEREAS, Andrew's high-spirited personality and pragmatic style served the Board well in its efforts to separate fact from fiction in a multitude of regulatory actions;

WHEREAS, Andrew served the valuable role of encouraging an open and useful dialogue with the research community;

WHEREAS, Andrew's participation on the Board often raised scientific and engineering issues.

NOW, THEREFORE, BE IT RESOLVED that the Board wishes Andrew success in his future endeavors and expresses its appreciation for his contributions on behalf of clean air.

Jacqueline E. Schafer, Chairwoman

Brian P. Bilbray, Member

John S. Lagarias, Member

Eugene A. Boston, M.D., Member

Jack C. Parnell, Member

Joseph C. Calhoun, Member

Barbara Riordan, Member

Lynne T. Edgerton, Member

Douglas E. Fagan, Member

M. Patricia Hilligoss, Member

Harlett M. Wieder, Member

STATE OF CALIFORNIA
AIR RESOURCES BOARD
2020 L STREET
P.O. BOX 2815
SACRAMENTO, CA 95812

PETE WILSON, Governor

State of California
AIR RESOURCES BOARD

**Notice of Decision and
Response to Significant Environmental Issues**

Item: PUBLIC MEETING TO CONSIDER THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT'S REGIONAL CLEAN AIR INCENTIVES MARKET (RECLAIM)

Approved by: Resolution 94-11

Agenda Item No.: 94-3-1

Public Hearing Date: March 10, 1994

Issuing Authority: Air Resources Board

Issue/Comment:

The Environmental Assessment prepared by the South Coast Air Quality Management District as lead agency for the project and certified by the District Governing Board on October 15, 1993 identified a number of adverse impacts from the adoption of rules to implement RECLAIM. The Environmental Assessment (EA) concluded that although specified air quality impacts due to increases in ozone and oxides of nitrogen (NOx), compared to the 1991 Air Quality Management Plan (AQMP), were significant, the proposed NOx and SOx (i.e., oxides of sulfur) RECLAIM programs have equivalent or greater overall air quality benefits than the 1991 AQMP. It was also concluded that potential adverse environmental impacts would be equivalent for all market incentive alternatives considered and that the staff proposal presented the best balance between adverse impacts and improvements in air quality and emission reductions ultimately achieved, while maintaining compliance with the statutory criteria for the program and achieving economic, social, and technological feasibility.

Most potential impacts discussed in the EA which could result from implementing NOx and SOx RECLAIM were either not significant or could be mitigated to insignificance, and the District Governing Board adopted a Mitigation Monitoring Plan to accomplish all necessary and feasible mitigation. Adverse impacts which could not be mitigated below a level deemed significant included short-term increases in ozone levels in some localized areas of the Air Basin and NOx emissions which air quality modeling indicated would be higher for two years under RECLAIM than they would have been under the 1991 AQMP. The District conservatively concluded that these would be significant air quality impacts although, overall, RECLAIM would provide greater air quality benefits than the 1991 AQMP. Further, potential mitigation measures, such as increasing the annual rate of reduction in emissions under RECLAIM, could result in technologically

infeasible requirements or the elimination of the economic benefits of the program, jeopardizing compliance with the statutory criteria set forth in AB 1054.

The District Governing Board also found that RECLAIM could generate significant water demand impacts since compliance options could include the installation of control technologies that use water as part of the control process, such as hydrosulfurization, scrubbers, mist eliminators, and condensers. These water demands are not substantially different from those associated with the measures in the 1991 AQMP; they cannot be reduced to insignificance.

The third adverse impact described in the EA is "risk of upset" impacts from control projects using selective catalytic reduction and associated ammonia, despite the implementation of all feasible mitigation measures. Potential public exposure to irritation levels of ammonia (100 ppm) in the event of an accidental release of ammonia during transport do not differ significantly under RECLAIM from the 1991 AQMP, but a change in District policy whereby projects associated with ammonia use are deemed to have potentially significant adverse impacts necessitated a finding of significance in the RECLAIM setting.

Upon certifying the EA and adopting the NOx and SOx RECLAIM rules, the District Governing Board adopted a Statement of Overriding Considerations which concluded that for specified reasons, the benefits of the project outweigh the potential unmitigated impacts.

Action/Response:

The Air Resources Board, a responsible agency for this project under CEQA, approved the NOx and SOx RECLAIM rules at a public hearing on March 10, 1994. Prior to acting, the Board considered the environmental documents prepared by the SCAQMD. As stated in Resolution 94-11,

> "the ARB staff and the Board have reviewed the RECLAIM rules and regulations; the accompanying administrative record; the District's 1991 Air Quality Management Plan ("Plan"); the Environmental Assessment and accompanying documents, comments, and responses prepared for the program; the Socioeconomic Impact Assessment; and the written testimony presented by affected industry and the public for RECLAIM."

After reviewing the documents cited above as well as additional written and oral testimony presented by ARB staff, the District, industry, environmental groups, and the public, the Board concluded that the District's environmental documents complied with the substantive and procedural requirements of CEQA. The Board also found that all feasible mitigation measures were committed to by the District, and that approval of RECLAIM by the Board "will not have any adverse environmental impacts which the ARB can or should independently mitigate." The Board adopted the District's environmental documents, including the findings and Statement of Overriding

Considerations, by reference. ARB Resolution 94-11, dated March 10, 1994, and the District's findings, Statement of Overriding Considerations, and Mitigation Monitoring Plan, are attached hereto and incorporated by reference herein.

Issue/Comment:

Citizens for a Better Environment commented that substantial changes to RECLAIM since the drafting of the final Environmental Assessment and since the time the District Governing Board certified the EA and adopted RECLAIM (October 15, 1993) necessitate the preparation and circulation of a subsequent EA by the ARB, which would assume the role of lead agency. The changes alleged to be "substantial" are the exclusion of three city utilities from RECLAIM and the increase of the initial RECLAIM allocations for cycle one facilities by 5% over the October allocations, resulting in increased pollution.

However, as explained on the record, the utilities will be subject to the command and control measures set forth in the AQMP, which will require equivalent emission reductions as RECLAIM, although with less flexibility to the utilities. Moreover, the RECLAIM rules as proposed to the District Governing Board and as adopted on October 15, 1993, always included provisions whereby sources could have their starting allocations increased on the basis of specific adjustment factors set forth in the rules (see Rule 2002, "Allocations for Oxides of Nitrogen (NOx) and Oxides of Sulfur (SOx))." The allocation adjustment process was subject to environmental analysis and public comment before certification of the EA and adoption of the rules. The fact that facilities are taking advantage of the rule and increasing their initial allocations pursuant to the criteria established therein is a result of implementation of the rule as anticipated, and not a substantial change in the program.

The rules specify that any increases in allocations which occur based on any adjustments made pursuant to Rule 2002(c)(12), Rule 2015(c)(2) and Rule 2015(e) shall be offset during preparation of future AQMP revisions. (See Rule 2015(c)). In addition, the rules assure that the allocations in the year 2000 will not be above the projected inventory for those same sources under the 1991 AQMP by specifically requiring the District to establish a percentage "inventory adjustment factor" that will be applied to adjust each facility's allocation if necessary to achieve equivalent reductions to the AQMP. (See Rule 2002(d) and (e).) A similar adjustment methodology is set forth for the year 2003 allocations.

Because the changes raised by CBE were contemplated by the rule and discussed in the EA and, indeed, throughout the District's lengthy rule development process, they are not changes in the activity or with respect to the circumstances under which the project is being undertaken to warrant preparation of a subsequent EA. Nor is there new information regarding new or more severe significant effects than shown in the District's EA, or new information on alternatives or mitigation measures. Under the

circumstances, the Board was justified in relying on the District's environmental documents and was not required to prepare a subsequent EA. (See Bowman v. City of Petaluma (1st Dist. 1986) 185 Cal.App.3d 1065, 1070-1074; Fund for Environmental Defense v. County of Orange (4th Dist. 1988) 204 Cal.App.3d 1538; Long Beach Savings and Loan Association v. Long Beach Redevelopment Agency (2d Dist. 1986) 188 Cal.App.3d 249; and Stone v. Tuolumne County (5th Dist. 1988) 2055 Cal.App.3d 927.) The initial allocation issue was discussed in detail at the Board's hearing, and the Board made a finding that "there [have not] been changes to RECLAIM or to the circumstances under which RECLAIM will operate which are so substantial as to require the preparation of a subsequent or supplemental environmental assessment." (Resolution 94-11, finding 17, at page 6)

Issue/Comment:

NRDC contends that substantial modifications were made to the RECLAIM program "only days before the September and October Governing Board hearings and subsequent to the expiration of the official comment period." While the District asserted that the changes were refinements and clarifications, NRDC said they were substantive and "could potentially have significant adverse environmental impacts." NRDC seems to want the ARB to prepare a supplemental EA to address the changes.

Action/Response:

Procedurally, we wish to note that since the changes took place prior to certification of the final EA by the District, the proper course would have been to have the EA amended and recirculated if further environmental review was in fact necessary. (See Public Resources Code section 21092.1, Sutter Sensible Planning, Inc. v. Bd. of Sups. (3d. Dist. 1981) 122 Cal.App.3d 813, 822, and Resource Defense Fund v. LAFCO (1st Dist. 1987) 191 Cal.App.3d 886). However, recirculation is required only where significant new information is added or other substantial changes are made to the EA. Public agencies are encouraged to modify and improve projects based on public comments, and there would be no incentive to do so if recirculation were required for every change. (See Sutter, supra., 122 Cal.App.3d at 822-823 and State of California v. Block (9th Cir. 1982) 690 F.2d 753,771).

None of the changes cited by NRDC occurred after EA certification in October 1993, nor did any new information come to light between the District Governing Board action and ARB consideration of RECLAIM approval; hence a supplemental EA is not appropriate. (See Sierra Club v. Gilroy City Council (6th Dist. 1990) 222 Cal.App.3d 38.) Further, even if the ARB could prepare new environmental documentation, the Board determined on the record that the District had sufficiently addressed the issues raised; that the RECLAIM rules themselves provided for a number of the types of outcomes which NRDC is concerned about; that significant environmental impacts would not result from the changes the District had made to the rules; or that the changes to the rules or to the circumstances under which RECLAIM would be carried out were not so substantial as to require the ARB to prepare a supplemental EA.

NRDC's specific areas of concern are addressed in detail in the record of the Board hearing. The issues and responses can be summarized as follows.

First, NRDC states that there were changes in emission factors used to calculate allocations. Rule 2002 contains an allocation formula which utilizes source-category specific emission factors, set forth in Tables 1 and 2 of Rule 2002 for NOx and SOx, respectively. Naturally, the emission factors were a subject of intense discussion between the regulated industry and the District, for low historical emissions would lead to a lower allocation while a higher emission factor for a particular source type would lead to a more robust allocation. The rule contemplates adjustment of emission factors on the basis of technical information pertaining to the type of equipment as well as permit information submitted by the facility. (See Rules 2002(c)(2) and 2015(c)(3).)

While a number of the emission factors in the tables changed between the District's July and October staff reports, they were always set forth in their final form in the draft and final EA, were subject to public comment, and were discussed prior to adoption by the District Governing Board. Moreover, any increase in allocations due to changes in emission factors are taken into consideration in the RECLAIM rules by adjusting the reduction percentage for future year allocations (Rule 2002(f)), making up the difference in future AQMPs (Rule 205(c)(1)), or instituting program specific backstops (Rule 2015(d)).

Second, NRDC contends that changes in the rates of reduction applied to Emission Reductions Credits (ERCs) for conversion to RECLAIM trading credits (RTCs) resulted in increased allocations which could have adverse environmental impacts. However, since the ERCs held by the applicable sources could, under the AQMP, be applied without a reduction in value in perpetuity, the fact that their value as RTCs is subject to a rate of decline after year six of the program (i.e., 2000) instead of immediately still results in greater air quality benefit due to their conversion to RTCs. Although NRDC may have wanted a more rapid decline in their value, this issue was aired before the District Board, which could legitimately change the draft rule at its hearings.

Third, NRDC is concerned about provisions in the rules which allow increased allocations to electric utilities and natural gas distributors for supplying fuel for alternative fuel vehicles. This provision was added by the District Governing Board on the basis of discussions regarding the possible increased demand for electricity and natural gas as a result of ARB clean fuel and low emission vehicle programs. These vehicle programs will affect demand regardless of whether the supplying sources are subject to RECLAIM or to the command and control measures in the AQMP. The measures in the AQMP which applied to electric generating and natural gas distribution facilities - which control emissions based on <u>concentration rates</u> as opposed to RECLAIM's <u>mass emission caps</u> - would have allowed an increase in

emissions. The increase which is possible under RECLAIM pursuant to Rule 2015(c)(2) merely maintains equivalence with the AQMP.

Further, the rule requires the District's Executive Officer to propose amendments to Rule 2002 to increase the allocations only if an evaluation of energy demand establishes a need for such increase. In that event, environmental documentation would be prepared along with the proposed amendments prior to their adoption by the District Governing Board, as required by CEQA.

Fourth, NRDC points out that alteration of the penalty calculations may cause negative impacts on the environment, but supplies no detail. Both the District and the ARB determined that the penalty provisions, especially the calculation procedure for violation of the annual allocation and the need for the facility to make up the difference the next year, ensures that the cost of noncompliance vastly outweighs the cost of compliance. The deterrent effect of the RECLAIM penalty provisions on violations of the rules is as great for RECLAIM as for the measures in the AQMP. The Board specifically found that the penalty structure met the statutory criteria (see Resolution 94-11, finding 3 at page 3). Thus, no adverse impact on air quality is anticipated as a result of minor changes to the penalty provisions.

Fifth, NRDC claims that the backstop provisions were weakened by providing that backstops measures be "proposed" instead of adopted. However, by law, the District's Executive Officer cannot assure that the Governing Board will adopt a particular measure, for it is the role of the Governing Board to do so only after complying with public hearing requirements on the basis of the evidence presented. Thus, Rule 2015 provides for annual and triennial audits of RECLAIM to allow the Governing Board to evaluate the program's performance against specific detailed criteria, and to amend all aspects of the program as necessary.

For example, Rule 2015(d) requires the Executive Officer to propose amendments to address "any specific problems," which could include "implementing technology-specific emission reductions" and, if these program amendments fail to correct the problem, the Executive Officer "shall recommend that the Governing Board, after holding a Public Hearing, consider reinstating all or a portion of the source category-specific emission limits or control measures contained in the then current AQMP" in lieu of RECLAIM (Rule 2015(d)(2)). Due process and the regulation adoption requirements set forth in the Health and Safety Code necessitate this approach, and there is no evidence that adverse impacts on the environment may result.

Finally, NRDC is concerned that a specific clause requiring the imposition of BARCT (best available retrofit control technology) on RECLAIM sources in the event RECLAIM is invalidated was removed by the District Governing Board when the RECLAIM rules were adopted. The emission reductions required from existing sources in the RECLAIM program were

specifically designed to be equivalent, in the aggregate, to the source-specific technology requirements set forth in the AQMP. Both the RECLAIM reductions and the AQMP BARCT measures stem from the same Health and Safety Code requirement that BARCT, as defined in Health and Safety Code section 40406, be required for all existing permitted stationary sources (H&SC section 40919(c) and 40920.5). If RECLAIM is invalidated, the BARCT requirement remains in existence by operation of law, and no specific severability provision is required in the RECLAIM rules. Nevertheless, it does appear that the BARCT provision is set forth in Rule 2015(e) and is the last sentence of the RECLAIM rules.

Issue/Comment:

A market incentives program such as RECLAIM is required by statute to achieve reductions of air pollutant emissions which are equivalent to those which would be achieved by the air quality plan which the District prepared and submitted to the ARB pursuant to the California Clean Air Act, at equivalent or less economic cost and dislocation. Thus, the entire process of developing and approving a NOx and SOx RECLAIM regulation involves important environmental issues centered on the enhancement of air quality in the SCAQMD. The documents prepared by the District to support the RECLAIM program, whether labeled Environmental Assessment or not, all involve air quality issues to a large extent. The extensive record which the Board considered in approving the District action is inextricably linked with air quality issues. Resolution 94-11 summarizes and addresses these issues. Interested parties are advised to consult the Staff Report, the Resolution, and the documents cited therein for a more lengthy and detailed discussion of the air quality issues germane to the Board's approval of the rules and regulations which will implement RECLAIM.

Certified:

Artavia M. Edwards
Regulations Coordinator

Date: March 21, 1994

State of California
AIR RESOURCES BOARD

Resolution 94-11

March 10, 1994

WHEREAS, the Legislature has declared that the public interest in clean air shall be safeguarded by an intensive and coordinated state, regional, and local effort to protect and enhance the ambient air quality of the state;

WHEREAS, toward that end, the Air Resources Board ("ARB" or "Board") has adopted ambient air quality standards to protect the public health, safety, and welfare pursuant to section 39606 of the Health and Safety Code for, among other pollutants, ozone, nitrogen dioxide, and sulfur dioxide and PM_{10} (inhalable particles less than 10 microns in diameter);

WHEREAS, each air pollution control or air quality management district (district) which has been designated a nonattainment area for ozone, nitrogen dioxide, sulfur dioxide, or their precursors has prepared and submitted to the ARB a plan for attaining the standards by the earliest practicable date through the adoption and implementation of all feasible control measures, as required by sections 40910 through 40922 of the Health and Safety Code;

WHEREAS, districts which exceed the PM_{10} standard must make reasonable efforts to attain it;

WHEREAS, the South Coast Air Quality Management District ("District") is a nonattainment area for ozone, a pollutant formed in a photochemical reaction between oxides of nitrogen and hydrocarbons, which are ozone precursors, as well as for nitrogen dioxide and PM_{10};

WHEREAS, oxides of sulfur (SOx) and nitrogen (NOx) are precursors to PM_{10};

WHEREAS, pursuant to the California Clean Air Act, the District submitted, and on October 16, 1992 the ARB approved, an ozone attainment plan which, among other measures, contains a market-based emission reduction strategy for specified sources of NOx and hydrocarbons called the Regional Clean Air Incentives Market, or RECLAIM;

WHEREAS, rules and regulations to implement RECLAIM were adopted by the District Board on October 15, 1993 to replace a series of control measures affecting twenty (20) emission source categories set forth in Tiers 1 and 2 of the District's ozone attainment plan (1991 Air Quality Management Plan) and as an attainment strategy to reduce NOx and SOx in order to make progress towards attaining the PM_{10} standard;

WHEREAS, the Legislature, in section 39616(a)(2) of the Health and Safety Code, has endorsed market-based permitting programs such as RECLAIM an alternative to traditional "command and control" for improving air quality, as long as such programs result in equivalent emission reductions while expending fewer resources and while maintaining or enhancing the State's economy;

WHEREAS, section 39616(b) of the Health and Safety Code authorizes a district to adopt and implement a market-based incentive program as an element of the district's attainment plan in lieu of some or all of the current or anticipated command and control measures, provided that all of the criteria specified in section 39616(c) are met and that express findings are made and substantiated by the district;

WHEREAS, within 90 days after submittal of rules and regulations by a district to implement a market-based incentive program, the ARB must determine whether the rules and regulations meet all of the statutory criteria;

WHEREAS, section 40440.1 of the Health and Safety Code sets forth additional conditions pertaining to the nature and scope of the emissions reduction trading component which a market-based incentive program must meet in order to be acceptable;

WHEREAS, the District submitted the adopted RECLAIM program and the extensive administrative record to the ARB on February 4, 1994;

WHEREAS, the California Environmental Quality Act (CEQA; Public Resources Code section 21000 et seq.) and the CEQA Guidelines require that no project which may have a significant environmental impact may be adopted as originally proposed if feasible alternatives or mitigation measures are available to reduce or eliminate such impacts, unless specific overriding considerations are identified which outweigh the potential consequences of any unmitigated impacts;

WHEREAS, the ARB is a "responsible agency" for CEQA purposes and is required to consider the environmental documents submitted by the lead agency, in this case the District, prior to making its CEQA findings and approving the project or activity (RECLAIM);

WHEREAS, the ARB staff and the Board have reviewed and considered the RECLAIM rules and regulations; the accompanying administrative record; the District's 1991 Air Quality Management Plan as amended in 1992 ("Plan"); the Environmental Assessment and accompanying documents, comments, and responses prepared for the program; the Socioeconomic Impact Assessment; and the written testimony presented by affected industry and the public for RECLAIM;

WHEREAS, the findings set forth below are supplemented by and based upon the detailed analysis set forth in the ARB Staff Report, District Board Resolution No. 93-28 (October 15, 1993), and the documents cited above, all of which are incorporated by reference herein, and by the Board's and staff's responses to comments on the record;

WHEREAS, the Board has held a duly noticed public meeting and, in addition to the written submittals, has considered the testimony presented by staff, the District, industry, environmental groups, and the public;

WHEREAS, on the basis of all the evidence before it, the Board finds:

1. ARB staff has participated fully in RECLAIM program development and RECLAIM committees and work groups from its inception as a "further study" measure in the 1989 SCAQMD attainment plan to adoption of the RECLAIM rules and regulations by the District Board in October 1993.

2. RECLAIM will result in an equivalent or greater reduction in emissions at equivalent or less cost compared with the Tier I and II command and control measures which would have otherwise been adopted as part of the District's 1991 Air Quality Management Plan within the same timeframe (to 2003) because RECLAIM will require subject sources to reduce their emissions, in the aggregate, by an equivalent amount as the Plan, taking into account the potential increase in emissions that could result from increased productivity at a facility as the recession ends and the Plan's continued use of concentration limits, or rates, as opposed to RECLAIM's imposition of mass caps on facility emissions.

3. The penalty structure adopted into RECLAIM will provide a comparable level of deterrence as would apply for command and control measures in order to ensure compliance with the program's emission reduction requirements, because penalties can be assessed for numerous types of violations, including: violations of annual emission allocations based on each day of the year and for the amount of excess emissions; for reporting data inaccurately on quarterly reports, with each day of the quarter being a separate violation; and for violating concentration limits, operating parameters and other permit conditions on a daily basis, so that total available penalties substantially exceed the cost of compliance.

4. The monitoring requirements of RECLAIM include a greater number of continuous emission monitoring systems (CEMs) to be installed on large sources covering the majority of RECLAIM emissions, more extensive mandatory source testing, and frequent and accurate recordkeeping and reporting, ensuring that such monitoring and reporting requirements will provide a level of enforcement and monitoring to ensure compliance with the program's emission reduction requirements comparable to that under command and control.

5. The baseline emission methodology established for RECLAIM was the result of hard and long discussions among the District, industry, and all interested parties, taking into account peak production activity, emissions history, economic factors, existing and future control requirements, and emission source category characteristics, to ensure that sources which were modified to reduce emissions and stringently controlled prior to implementation of RECLAIM receive appropriate credit and equitable treatment.

6. The socioeconomic impact analysis performed by the District is consistent with both the District Board's March 17, 1989 Socioeconomic resolution for rule adoption and with section 40728.5 of the Health and Safety Code, utilizing supportable methodology to demonstrate that RECLAIM will not result in a greater loss of jobs or more significant shifts from higher to lower skilled jobs than would otherwise occur under the 1991 Plan's command and control measures, and will in fact result in increased job opportunities for all ethnic groups in each occupation group.

7. Because development of the baseline took into account the circumstances of each category of regulated sources and because the annual rate of reduction required for RECLAIM sources is based upon the rate of reduction which would result from the adoption and implementation of the command and control measures, including best available retrofit control technology on existing sources, as set forth in the 1991 Plan, RECLAIM will not result in disproportionate impacts, in terms of required emission reductions in the aggregate, between RECLAIM and non-RECLAIM sources.

8. Implementation of RECLAIM will not delay, postpone, or hinder District compliance with the requirements of the California Clean Air Act, specifically with the goals and objectives of the attainment planning requirements set forth in sections 40910-40927 of the Health and Safety Code, because RECLAIM is a more flexible and economically viable means of accomplishing emission reductions within the same range as those which would have resulted from the expeditious adoption of all feasible measures as set forth in the 1991 Plan as amended in 1992, including reductions of overall population exposure to pollution in excess of the ozone standard by at least 25% by December 31, 1994; 40% by December 31, 1997; and 50% by December 31, 2000.

9. The commitment to adopt the replaced command and control measures in the 1991 Plan as contingency measures in accordance with the "Rule Development Report for RECLAIM and Other Rules" endorsed by the District Board at its July 8 and October 15, 1993 public hearings and the opportunities for adjusting the allocations which are built into the RECLAIM rules will prevent backsliding and ensure that RECLAIM achieves equivalent emissions reductions as the replaced measures.

10. The District Board has committed itself to reassess RECLAIM within nine months if the average annual market price of emission trading units exceeds $25,000 per ton of NOx emissions or $18,000 per ton of SOx emissions, adjusted annually to reflect changes in the consumer price index, and has committed itself to revise the market price review level based upon economic factors including RECLAIM's effect on jobs, business formation and longevity, and the commensurate costs of command and control measures, as required by section 39616(f) of the Health and Safety Code.

11. RECLAIM permits the trading of emission reduction credits from a significant number of stationary sources, and holds the promise of expanding the trading component to include a greater number and variety of sources if this becomes practicable and desirable for air quality.

12. Pending amendments to the District's Regulation 13 (New Source Review) will correct any imbalance between the supply and demand of credits in the District's Community Bank and Priority Reserve, available to eligible non-RECLAIM sources, and will ensure equity among RECLAIM and non-RECLAIM sources as well as adequate funding to preserve economic growth.

13. Ongoing examination and analysis of the transactional costs associated with RECLAIM, including a determination of the costs associated with the monitoring protocols, will assist the District in ensuring that the costs associated with RECLAIM are less than or equal to those associated with the command and control measures it replaced while still complying with state and federal law.

14. RECLAIM will meet the State's "no net increase" provisions for all foreseeable emissions increases based on the District's analysis of available emission reduction credits and the District Board's direction to track emission increases and reductions to ensure continued compliance with such provisions.

15. The District's Environmental Assessment, responses to comments, Mitigation Monitoring and Reporting Plan, and Statement of Overriding Considerations comply with the applicable procedural and substantive requirements of CEQA and are sufficient to serve as the environmental documentation for the ARB as a responsible agency.

16. All feasible mitigation measures were committed to in order to reduce the identified impacts of RECLAIM, and for all significant adverse impacts which could not be reduced to insignificance through the imposition of feasible mitigation measures, the District prepared a Statement of Overriding Considerations.

17. Approval of RECLAIM by the Board will not have any adverse environmental impacts which the ARB can or should independently mitigate, nor have there been changes to RECLAIM or to the circumstances under which RECLAIM will operate which are so substantial as to require the preparation of a subsequent or supplemental environmental assessment.

18. While the adoption and implementation of command and control measures have been and continue to be a successful means for reducing emissions and making progress towards the attainment of the ambient air quality standards, the economic realities in Southern California, the emerging federal and state policy of encouraging choice and flexibility to regulated businesses, the desirability of capping emissions on a mass basis at levels less than the current capacity of sources to emit, and the depth and breadth of the District staff's knowledge, expertise, and commitment to air quality provide a timely opportunity to initiate an innovative new effort to stimulate the economy and clean the air.

19. Monumental effort and countless hours on the part of District staff, affected industry, environmental groups, the general public, and ARB and federal EPA staff have gone into development of the RECLAIM rules and regulations.

20. RECLAIM is not unalterable and inflexible; if experience warrants program amendment or abandonment, sufficient safeguards and opportunities for reassessment are built into the program to ensure timely adjustment.

NOW, THEREFORE, BE IT RESOLVED, that the Board concurs with the District Board's adoption of the Regional Clean Air Incentives Market (RECLAIM), consisting of Rules 2000 (General), 2001 (Applicability), 2002 (Allocations for NOx and SOx), 2004 (Requirements), 2005 (New Source Review for RECLAIM), 2006 (Permits), 2007 (Trading Requirements), 2008 (Mobile Source Credits), 2010 (Administrative Remedies and Sanctions), 2011 and 2012 and associated protocols (Requirements for Monitoring, Reporting, and Recordkeeping for SOx and NOx, respectively), and 2015 (Backstop Provisions), and determines that the rules and regulations comprising RECLAIM meet the requirements of sections 39016 and 40440.1 of the Health and Safety Code.

BE IT FURTHER RESOLVED, that the Board adopts the District's environmental documents by reference, including the findings and Statement of Overriding Considerations, and directs the Executive Officer to respond to the CEQA concerns raised in accordance with the Board's direction and to file a Notice of Decision with the Secretary for Resources as required by CEQA.

BE IT FURTHER RESOLVED, that the Board commends the staff and Board of the SCAQMD, as well as the businesses and public who also participated, for their unflagging efforts to develop a workable, efficient, economically viable and environmentally protective market incentive program and encourages them to implement and refine the program with equal enthusiasm based on the challenges and lessons which RECLAIM will present.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to continue to monitor and participate in the implementation of RECLAIM and its expansion to include sources of hydrocarbons as well as a greater variety of NOx and SOx sources to the extent technical analysis and experience prove this feasible.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to present a status report on RECLAIM at least annually and more often if warranted.

I hereby certify that the above is a true and correct copy of Resolution 93-11 as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

ATTACHMENT 1

FINDINGS, STATEMENT OF OVERRIDING CONSIDERATIONS, AND MITIGATION MONITORING PLAN

Findings - Consideration of Potentially Significant Adverse Impacts and Findings

Findings - Significant Impacts that Can Be Mitigated

Findings - Significant Impacts that Cannot Be Reduced Below A Significant Level

Statement of Overriding Considerations

Mitigation Monitoring Plan

FINDINGS - CONSIDERATION OF POTENTIALLY SIGNIFICANT ADVERSE IMPACTS

Pursuant to the California Environmental Quality Act (CEQA), when a lead agency determines that a project may have a significant adverse effect on the environment and that an environmental analysis of the proposed project is necessary, an initial study is prepared to identify environmental areas in which adverse impacts may occur. The initial study and a notice to the public that a CEQA analysis is being prepared is then circulated to the public for additional input regarding the scope of the environmental analysis to be conducted for that project. Pursuant to the South Coast Air Quality Management District's (District) certified regulatory program (Rule 110) and the state and District CEQA Guidelines, the CEQA document prepared for the proposed NO_x and SO_x Regional Clean Air Incentives Market (RECLAIM) programs was an Environmental Assessment. The Final Environmental Assessment for the proposed NO_x and SO_x RECLAIM programs is a comprehensive document and is comprised of three of the five volumes of the proposed NO_x and SO_x RECLAIM programs Staff report: Volume I - Development Report and Proposed Rules; Volume II - Supporting Documentation; and Volume III - Socioeconomic and Environmental Assessments.

The District as lead agency prepared a Notice of Preparation of a Draft EA (NOP) for the proposed NO_x and SO_x RECLAIM programs, which included an initial study. The NOP was circulated to the public on October 23, 1992, for a 30-day public review and comment period. Chapter 2 of the initial study (the environmental checklist), identified environmental areas that may be adversely affected by adopting the proposed programs. Chapter 3 of the initial study explained why the proposed programs could create adverse impacts in the environmental topics checked "Yes" or "Maybe" on the environmental checklist. Chapter 3 of the initial study also explained why adverse impacts were not expected in the environmental areas checked "No" on the environmental checklist.

The May 1993 draft of the five-volume Staff Report for the proposed NO_x and SO_x RECLAIM programs was circulated for a 30-day public review and comment period on May 24, 1993. As previously noted, the Draft EA for the

proposed NO_x and SO_x RECLAIM programs was included in Volume III as Chapters 7 through 9. Chapter 8 - Environmental Impacts, identified and analyzed all potential direct and indirect adverse environmental impacts that could result from adopting the District's proposed NO_x and SO_x RECLAIM programs.

After evaluating comments received on the May 1993 Draft Staff Report, the District made several minor revisions to the May 1993 NO_x and SO_x RECLAIM programs. The Staff Report, including the environmental and socioeconomic analyses, was revised and recirculated on July 22, 1993 for a second 30-day public review and comment period. On August 13, 1993, a notice was circulated to the public stating that this second public review and comment period would be extended an additional 15 days, thereby allowing the public a total of 45 days to review the Revised Staff Report.

The revised analysis in the EA (Chapter 8 of the Revised Draft Staff Report for the proposed programs) included updated modeling analyses to reflect the revised NO_x and SO_x RECLAIM programs. The results of the revised emissions trading model analyses indicate that there may be slight changes in the timing of installation of specific control technologies. In general, no new technologies were identified and installation of some control technologies was slightly delayed compared to the analysis in the May 1993 Staff Report. As a result of the revised analysis of the emissions trading model, effects on the environmental analysis were determined to be minor and did not substantially change potential impacts that could be generated by the proposed project. The primary exception to this conclusion was the fact that effects on air quality resulting from implementing the proposed NO_x and SO_x RECLAIM programs were more beneficial compared to the effects of the May version of the programs.

The District also revised the analysis of projected impacts that could result from the No Project Alternative (which is the 1991 AQMP) to more accurately reflect rules and regulations that have actually been adopted, as well as reflecting changes to the 1991 AQMP rulemaking calendar for 17 1991 AQMP control measures. As a result of these revised analyses, the conclusion regarding SO_x air quality impacts was changed from significant to insignficant because air quality modeling demonstrated that the proposed NO_x and SO_x RECLAIM programs would actually achieve greater SO_x emission reductions than the 1991 AQMP. No other conclusions were changed as a result of the revised analysis.

The state CEQA Guidelines Section 15121 maintains that a CEQA document, "...is an informational document which will inform public agency decision-makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project." The District considered a reasonable range of alternatives in both the May Draft and the July Revised Draft Environmental Assessments. In general, the alternatives, except the No Project Alternative could feasibly attain the basic project objectives, i.e., to create a single market-based regulatory program for a large portion of NO_x and SO_x stationary sources in the South Coast Air Basin (Basin), reduce compliance costs compared to the 1991 AQMP, and produce air quality benefits at least equivalent to the 1991 AQMP.

It was concluded in the Revised Draft EA that, although air quality impacts are considered significant for ozone and NO_x for some years, the proposed NO_x and SO_x RECLAIM programs have equivalent or greater overall air quality benefits than the 1991 AQMP. Further, because the proposed NO_x and SO_x RECLAIM programs are expected to result in installation of the same types of control equipment compared to the AQMP (as would the other project alternatives), spread out over a longer period of time, it was concluded that potential adverse environmental impacts would be relatively equivalent to the AQMP for all alternatives, or possibly less, because later installation of control equipment might allow new, more efficient, and less polluting control technologies to be developed.

In summary it was determined in the Final Environmental Assessment that the analysis of project alternatives indicated that potential adverse impacts from all market incentive alternatives are approximately equivalent. Further, each alternative had slightly different effects regarding: improvements in air quality and emission reductions ultimately achieved. It was concluded that the current staff proposal (Alternative G) presents the best balancing of these factors while maintaining compliance with AB 1054 and achieving economic, social, and technological acceptability.

The CEQA Guidelines also state that a public agency shall consider the information in the CEQA document along with other information which may be presented to the agency. If significant impacts remain after mitigation, the decision-makers must make a determination that the benefits of the project outweigh the unavoidable adverse environmental effects before they may approve such a project. Staff has prepared for the District Governing

Board's consideration, a Statement of Overriding Considerations in connection with the following significant adverse environmental impacts that may be generated by implementing the proposed NO_x and SO_x RECLAIM programs: air quality, water demand, and risk of upset. When approving a project under such circumstances, the unavoidable adverse effects may be considered acceptable (state CEQA Guidelines, Section 15093). This Attachment sets forth the factors to be considered in the District Governing Board's evaluation of potential impacts and benefits resulting from implementation of the proposed NO_x and SO_x RECLAIM programs.

FINDINGS - SIGNIFICANT IMPACTS THAT CAN BE MITIGATED

The analysis presented in the Chapter 8 of Volume III of the Staff Report analyzed potential adverse environmental impacts in the following areas: air quality, water resources, land use, population, housing, transportation/circulation, risk of upset, public services, energy/natural resources, utilities-solid waste, utilities-communication systems, and human health. The Board finds that the anlysis in Chapter 8 of Volume III of the Staff Report concluded that for all of the environmental areas analyzed, except for air quality, water demand, and risk of upset as discussed in the next section, potential adverse impacts resulting from implementing the proposed NO_x and SO_x RECLAIM programs, including cumulative impacts, were not significant or could be mitigated to insignificance. The District Governing Board also finds and reaffirms that measures have been identified in the "Mitigation Monitoring Plan" section of this Attachment, which, upon implementation, will accomplish any and all necessary and feasible mitigation.

FINDINGS - SIGNIFICANT IMPACTS THAT CANNOT BE REDUCED BELOW A SIGNIFICANT LEVEL

CEQA prohibits a public agency from approving or carrying out a project for which a CEQA document has been completed which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding (CEQA Guidelines Section 15091). The following paragraphs include findings for significant impact and the rationale for each finding.

The District Governing Board has reviewed the Environmental Assessment for the proposed NO_x and SO_x RECLAIM programs (Chapters 7, 8, and 9 in Volume III of the Staff Report) and makes the following findings.

The Board finds that implementing the proposed NO_x and SO_x RECLAIM programs may generate short-term adverse impacts, namely increased ozone levels and oxides of nitrogen (NO_x) emissions. It should be noted that overall, both the 1991 AQMP and the RECLAIM programs will improve air quality in the Basin. The conclusion that RECLAIM will have a significant air quality impact is based upon a comparison of the effects on air quality between the 1991 AQMP and the RECLAIM programs. As noted in Chapter 8 of Volume III, overall, the RECLAIM programs provide greater air quality benefits than the 1991 AQMP. The conclusion of significant adverse air quality impacts is based upon two results. The first is that in some localized areas of the Basin, ozone concentrations were projected to be higher under RECLAIM than under the 1991 AQMP. The higher ozone concentrations, however, generally occur in nonpeak ozone areas. It should be further noted that the same modeling showed that other areas of the Basin would have higher ozone concentrations under the 1991 AQMP than RECLAIM. In addition, the projected higher ozone concentrations under the 1991 AQMP, were greater than those identified for RECLAIM. In other words, the magnitude of the difference in ozone concentrations was higher for the 1991 AQMP than for RECLAIM.

The second result contributing to the conclusion of significant air quality impacts is that modeling indicated that for two years RECLAIM did not reduce NO_x emissions to as great an extent as projected for the 1991 AQMP.

This difference in emission reduction effectiveness exceeded the District's daily threshold of significance for NO_x. Generally, for other pollutants, the RECLAIM programs are expected to result in air quality benefits equivalent to or greater than the 1991 AQMP. Therefore, the conclusion of significant air quality impacts is a conservative conclusion given the fact that, overall, RECLAIM will provide greater air quality benefits than the 1991 AQMP.

The Board finds that there are no feasible mitigation measures to reduce air quality impacts to insignificance and still achieve the objectives of the project. A variety of mitigation measures were evaluated as possible actions to eliminate such potential impacts. These included alternative allocation methods, rates of reduction, changes to the universe of sources, and trading restrictions. The feasibility of each option was examined according to the CEQA definition which states that "feasible means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors (CEQA Guidelines Section 15364). The District determined that potential mitigation measures, such as increasing the rate of reduction, could result in requirements that are technologically infeasible and/or would eliminate the economic benefits of the program, thus rendering the program infeasible from a CEQA standpoint and jeopardizing compliance with AB 1054.

The Board finds that implementing the proposed NO_x and SO_x RECLAIM programs could generate significant water demand impacts. It was determined in Chapter 8 of Volume III of the Staff Report that potential compliance options under RECLAIM could involve installation of the following control technologies that use water as part of their control process: hydrodesulfurization control equipment, scrubbers, mist eliminators, and condensers. It was concluded that, even though recent drought conditions have eased considerably, the Basin is still an area concerned with satisfying the water needs of its growing population. Therefore, the potential for increased water demand was concluded to be significant.

It should be noted that, although water demand impacts were determined to be significant, they are not substantially different than those expected under the 1991 AQMP. Indeed, because of the structure of the RECLAIM programs, potential water demand impacts were expected to be spread out over a longer time period under RECLAIM than under the 1991 AQMP. This would have the effect of reducing actual impacts at any one time,

although the impacts would be spread out over a longer period. Even with measures to mitigate water demand impacts to the maximum extent feasible, these impacts would remain significant.

Given the fact that water demand impacts are not substantially different from those expected under the AQMP and since water demand impacts for the 1991 AQMP were considered significant in the 1991 AQMP Final Environmental Impact Report, the conclusion of significant water demand impacts is a conservative conclusion given the fact that, water demand impacts from the proposed NO_x and SO_x RECLAIM programs are not expected to be substantially different from those anticipated under the 1991 AQMP. The Board finds that, even after implementing all feasible mitigation measures identified in the Mitigation Monitoring Plan, water demand impacts are expected to remain significant.

In both the May 1993 Draft and the July 1993 Revised Draft Environmental Assessments, it was determined that risk of upset impacts resulting from the proposed NO_x and SO_x RECLAIM programs would not be significantly different from the existing setting (the 1991 AQMP). As a result, the analysis concluded that significant adverse risk of upset impacts were not anticipated. In both documents, however, it was also noted that recent analyses of projects involving SCR and associated ammonia use could create significant adverse impacts, in spite of implementing all feasible mitigation measures. Based upon the results of these analyses involving SCR and ammonia, the District recently implemented a change in policy in which projects associated with ammonia use are deemed to be significant in spite of implementing all feasible mitigation measures because of the potential for public exposure to irritation levels of ammonia (100 ppm) in the event of an accidental release of ammonia during transport. As a result of the recent change in District policy, and since all proposed project alternatives involve use of SCR and ammonia, the conclusion regarding risk of upset impacts has been changed to significant for the proposed NO_x and SO_x RECLAIM programs and all project alternatives.

Changing the conclusion regarding risk of upset impacts to significant is not the result of receiving or identifying new information, but merely reflects a recent change in District policy. It should also be noted that risk of upset impacts from adopting Alternatives B through G are not anticipated to be significantly different from adopting Alternative A, the No Project Alternative. Concluding that risk of upset impacts from implementing the

project alternatives are significant is a conservative approach that highlights for decision makers potentially controversial issues associated with the proposed project and all proposed alternatives.

The District Governing Board finds that, as a result of a change in District policy, the proposed NO_x and SO_x RECLAIM programs and all alternatives to the proposed project have the potential to generate significant risk of upset impacts in the event of an accidental release of ammonia during transport. The Board finds further that implementing all feasible mitigation measures as identified in the Mitigation Monitoring Plan will not reduce potential risk of upset impacts to insignificance.

Summary

The May 1993 Draft and July 1993 Revised Draft Environmental Assessment for the proposed NO_x and SO_x RECLAIM programs analyzed 13 environmental areas in which potential adverse impacts could occur. In 10 of these 13 environmental categories, significant adverse environmental impacts are either not expected to occur or can be mitigated to insignificant levels. This Attachment primarily addresses the three categories of potentially adverse environmental impacts (air quality, water demand, and risk of upset) that cannot be fully mitigated, as discussed in the "Mitigation Monitoring Section."

Finally, the Board finds that the findings required by the CEQA Guidelines Section 15091 and described in the two sections preceding this summary, are supported by substantial evidence in the record.

STATEMENT OF OVERRIDING CONSIDERATIONS

Pursuant to Section 15093 of the CEQA Guidelines, CEQA requires the decision makers to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve the project. If the benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable." In the paragraphs below, the District specifies the

reasons to support its action based upon information in the Final Environmental Assessment and other information in the record.

Potential adverse environmental impacts and mitigation measures that could result from implementing the proposed NO_x and SO_x RECLAIM programs are described in Chapter 8 of Volume III of the Staff Report and in the "Mitigation Monitoring Plan" in the following section. In the preceding "Findings" sections, it was determined that significant adverse impacts may occur as a result of implementing the proposed NO_x and SO_x RECLAIM programs. It was also determined that no feasible mitigation measures or feasible project alternatives were identified in the case of air quality impacts. In addition, even implementing all feasible measures to mitigate water demand and risk of upset impacts are not anticipated to reduce these impacts to insignificant levels. Despite the District's inability to fully mitigate potential air quality, water demand, and risk of upset impacts, the District Governing Board finds that the benefits of the project, outweigh the potential unmitigated impacts for the following reasons:

- Adopting the proposed NO_x and SO_x RECLAIM programs would allow the District to adopt one consolidated program to replace a number of individual source specific rules in such a way as to lower compliance costs, while still demonstrating progress toward attaining state and federal ambient air quality standards.

- The 1991 AQMP calls for the development of one broad best available retrofit control technology (BARCT) rule. BARCT is typically defined as an equipment- or process-specific requirement. By redefining BARCT in terms of mass emission reductions, the proposed NO_x and SO_x RECLAIM programs may accelerate BARCT for all affected facilities.

- The proposed NO_x and SO_x RECLAIM programs are expected to achieve emission reductions equivalent to or greater than the 1991 AQMP and comply with the California Clean Air Act to achieve Basin-wide emission reductions of five percent per year.

- The proposed NO_x and SO_x RECLAIM programs are expected to allow greater compliance flexibility for affected sources.

- The proposed NO_x and SO_x RECLAIM programs may provide greater incentives for sources to find cleaner and less expensive

production technologies and to reduce pollution beyond required limits.

- The proposed NO_x and SO_x RECLAIM programs would not require new or additional mitigation measures beyond those identified in the Final EIR and Mitigation Monitoring Plan prepared for the 1991 AQMP.

The Board finds that the proposed NO_x and SO_x RECLAIM programs comply with the provision of AB 1054 and the requirements of CEQA, including identification of potential adverse environmental impacts, feasible mitigation measures, identification and comparison of alternatives, etc.

MITIGATION MONITORING PLAN

CEQA requires that for each identified significant adverse environmental impact, findings be prepared on how the lead agency proposes to mitigate these impact(s), and whether any potential mitigation measures or project alternatives are considered infeasible. These findings are to be further supported by a mitigation monitoring program (AB 3180, Cortese), incorporated into the Public Resources Code (PRC) as Section 21081.6, and which contains the following requirements:

> Section 21081.6. When making the findings required by subdivision (a) of Section 21081 or when adopting a negative declaration pursuant to Paragraph (2) of subdivision (c) of Section 21080, the public agency shall adopt a reporting or monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of an agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead or responsible agency, prepare and submit a proposed reporting or monitoring program.

This legislation requires follow-up monitoring for projects in which mitigation measures for potential adverse environmental impacts have been identified. However, specific guidelines as to how this monitoring is to be performed have not yet been developed. The State Office of Planning and Research has indicated that a draft study is currently under review and monitoring guidelines will be included in the next CEQA revision (Fergison, pers. com.). To fulfill the requirements of PRC 21081.6, the District has developed a monitoring plan for anticipated impacts resulting from implementation of the proposed NO_x and SO_x RECLAIM programs.

The following sections discuss potentially significant environmental impacts identified in Chapter 8 of Volume III of the Staff Report. Also identified are agencies responsible for performing follow-up monitoring as required by PRC 21081.6.

Determination of Environmental Impacts

The Draft EIR identified potential adverse environmental impacts in the following environmental categories: air quality, water impacts, energy/natural resources, risk of upset, utilities\solid waste, and human health. Impacts and mitigation measures are discussed in the following sections. The following agencies have been identified as agencies that may be responsible for implementing some of the mitigation measures.

State of California, Office of Planning and Research

California Department of Health Services

Metropolitan Water District of Southern California

Air Quality Impacts

Relative to air quality impacts, it was determined that the proposed NO_x and SO_x RECLAIM programs would provide equivalent or better overall air quality than a comparable set of command and control regulations (see Chapters 8 and 9 of Volume III for details). Nonetheless, utilizing stringent thresholds for potential adverse air quality impacts originally designed for land use projects and single pieces of equipment, it was concluded in the Environmental Assessment that there may be some potentially significant

impacts in select locations and years due to RECLAIM implementation. A variety of mitigation measures were evaluated as possible actions to eliminate such potential impacts. These included alternative allocation methods, rates of reduction, changes to the universe of sources, and trading restrictions. The feasibility of each option was examined according to the CEQA definition which states that "feasible means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors. (CEQA Guidelines sec. 15364.) The current staff proposal presents the best balancing of these factors while maintaining compliance with AB 1054 and achieving economic, social, and technological acceptability. Therefore, since no feasible mitigation measures or project alternatives that achieve the goals of the proposed NO_x and SO_x RECLAIM programs with fewer or less severe air quality impacts were identified, no additional mitigation measures have been included.

Water Impacts

IMPACTS: Water impacts were associated with various Tier I control technologies, including scrubber and mist eliminators, condensers, carbon adsorption, post-combustion treatment. Impacts were broken down into two areas water quality and demand. Water quality impacts were determined to be insignificant. It was concluded, however, that the proposed NO_x and SO_x RECLAIM programs would have little or no effects on water demand compared to the 1991 AQMP, but because such impacts were deemed significant in the 1991 AQMP Final EIR, it was determined that these potential impacts would remain significant.

MITIGATION: The mitigation measures provided in the 1991 AQMP Final EIR have been incorporated into the Final Environmental Assessment. These measures are summarized below. The reader is referred to the 1991 AQMP Final EIR for a complete discussion of all applicable mitigation measures.

Water Demand Mitigation

1. Use reclaimed water when possible;

2. Use of water treatment and steam condensers at refineries could reduce potential water demand impacts;

3. During construction, use alternative methods for dust control such as approved chemical soil binders, windbreaks, etc.; and

4. Where possible, use less water intensive control equipment.

RESPONSIBLE AGENCIES: SCAQMD and Water purveyors such as Metropolitan Water District.

MITIGATION MONITORING: Mitigation measures, as identified in the 1991 AQMP FINAL EIR, can and should be implemented primarily by the agencies identified above through their discretionary permit authority over water supply and distribution activities or as a responsible agency commenting on any CEQA documents that may be necessary for projects affecting water quality. Implementing the above mitigation measures is primarily within the responsibility of these other government agencies and is also within the jurisdiction of the District. These mitigation measures should be adopted and implemented by the district and the referenced agencies to ensure that water impacts are not significant or are reduced to the lowest feasible levels. The District will contact the appropriate agencies referenced above to determine whether these measures have been implemented.

Risk of Upset Impacts

IMPACT: In general, the results of the least-cost trading model indicated that, because of the flexibility inherent in the marketable permits program, a greater variety of compliance options would be available to affected facilities. As a result more benign control options could be used. As indicated in Chapter 8 of Volume III of the Staff Report, the net effect of the proposed amendments could be that risk of upset impacts could be less severe (but not significantly) compared to the 1991 AQMP. Because of recent policy changes regarding risk of upset analyses, as noted previously, risk of upset impacts associated with transport of ammonia for the proposed NO_x and SO_x RECLAIM programs (and all other project alternatives) are considered significant. Further, it was determined that sufficient mitigation measures are not available to reduce these impacts to insignificance.

MITIGATION: Since risk of upset impacts are equivalent or possibly slightly less severe compared to the 1991 AQMP, the same mitigation measures identified in the the 1991 AQMP continue to be applicable. The following paragraphs summarize the mitigation measures included in the 1991 AQMP

EIR. The reader is referred to the 1991 AQMP Final EIR for a complete listing of mitigation measures.

General Mitigation Measures

1. Compliance with all applicable safety, regulations to reduce the potential for accidental releases of hazardous materials;

2. Provide workers with safety guidelines regarding emergency response and emergency first aid procedures;

3. Provide workers with information regarding the appropriate agencies to contact in the event of an accidental release of a hazardous material;

4. Business emergency response plans and submit them to appropriate local agencies; and

RESPONSIBLE AGENCIES: Office of Emergency Services, local fire and police departments, CalOSHA, Department of Transportation, EPA, and Office of Environmental and Health Hazards Assessment.

MITIGATION MONITORING: The District Governing Board finds that the mitigation measures summarized above can and should be implemented primarily by the agencies identified above through their discretionary permit authority over safety and emergency response activities or as a responsible agency commenting on any CEQA documents that may be necessary for projects that could create risk of upset impacts. Implementing the above mitigation measures is primarily within the responsibility of these other government agencies and possibly within the jurisdiction of the District. These mitigation measures should be adopted and implemented by the referenced agencies to ensure that risk of upset impacts are not significant or are reduced to the lowest feasible levels. The District will contact the appropriate agencies referenced above.

Conclusion

The District will evaluate the effectiveness of these monitoring programs one year after Board adoption of the Proposed Amendment and every subsequent five years after that. If the above monitoring programs are

State of California

Air Resources Board

Resolution 94-12
March 10, 1994

Agenda Item No.: 94-3-2

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 397905; and

WHEREAS, a solicited research proposal, Number 2101-178, entitled " Heavy-Duty Truck Population, Activity and Usage Patterns," has been submitted by Jack Faucett Associates; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2101-178, entitled "Heavy-Duty Truck Population, Activity and Usage Patterns," has been submitted by Jack Faucett Associates, for an amount not to exceed $193,566.

NOW, THEREFORE BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by the Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2101-178, entitled "Heavy-Duty Truck Population, Activity and Usage Patterns," has been submitted by Jack Faucett Associates, for an amount not to exceed $193,566.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort herein in an amount not to exceed $193,566.

I hereby certify that the above is a true and correct copy of Resolution 94-12, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-13
March 10, 1994

Agenda Item No.: 94-3-2

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, an unsolicited research proposal, Number 2122-180, entitled "Improvement of Speciation Profiles for Architectural and Industrial Coating Operation," has been submitted by the California Polytechnic State University Foundation; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2122-180, entitled "Improvement of Speciation Profiles for Architectural and Industrial Coating Operation," submitted by the California Polytechnic State University Foundation, for a total amount not to exceed $150,000.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2122-180, entitled "Improvement of Speciation Profiles for Architectural and Industrial Coating Operation," submitted by the California Polytechnic State University Foundation, for a total amount not to exceed $150,000.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $150,000.

I hereby certify that the above is a true and correct copy of Resolution 94-13, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-14
March 10, 1994

Agenda Item No.: 94-3-2

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, a solicited research proposal, Number 2105-178, entitled "Determination of Formaldehyde and Toluene Diisocyanate Emissions from Indoor Residential Sources," has been submitted by the Battelle Memorial Institute; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2105-178, entitled "Determination of Formaldehyde and Toluene Diisocyanate Emissions from Indoor Residential Sources," submitted by the Battelle Memorial Institute, for a total amount not to exceed $298,719.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2105-178, entitled "Determination of Formaldehyde and Toluene Diisocyanate Emissions from Indoor Residential Sources," submitted by the Battelle Memorial Institute, for a total amount not to exceed $298,719.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $298,719.

I hereby certify that the above is a true and correct copy of Resolution 94-14, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-15
March 10, 1994

Agenda Item No.: 94-3-2

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, an interagency research proposal, Number 2126-180, entitled "Characterization of Ozone Episodes in the South Coast Air Basin: Effects of Air Parcel Residence Time and Weekday/Weekend Differences," has been submitted by the University of California, Los Angeles; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2126-180, entitled "Characterization of Ozone Episodes in the South Coast Air Basin: Effects of Air Parcel Residence Time and Weekday/Weekend Differences," submitted by the University of California, Los Angeles, for a total amount not to exceed $59,627.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2126-180, entitled "Characterization of Ozone Episodes in the South Coast Air Basin: Effects of Air Parcel Residence Time and Weekday/Weekend Differences," submitted by the University of California, Los Angeles, for a total amount not to exceed $59,627.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not exceed $59,627.

I hereby certify that the above is a true and correct copy of Resolution 94-15, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-16
March 10, 1994

Agenda Item No.: 94-3-2

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, an interagency research proposal, Number 2123-180, entitled "Toxicity of Chemical Constituents of PM10 in the South Coast Air Basin of California," has been submitted by the University of California, Irvine; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2123-180, entitled "Toxicity of Chemical Constituents of PM10 in the South Coast Air Basin of California," submitted by the University of California, Irvine, for a total amount not to exceed $598,900.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2123-180, entitled "Toxicity of Chemical Constituents of PM10 in the South Coast Air Basin of California," submitted by the University of California, Irvine, for a total amount not to exceed $598,900.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $598,900.

I hereby certify that the above is a true and correct copy of Resolution 94-16, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-17
March 10, 1994

Agenda Item No.: 94-3-2

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, an interagency research proposal, Number 2124-180, entitled "The Effects of Multi-day Exposure to Nitrogen Dioxide on Human Cellular Immunity," has been submitted by the University of California, San Francisco; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2124-180, entitled "The Effects of Multi-day Exposure to Nitrogen Dioxide on Human Cellular Immunity," submitted by the University of California, San Francisco, for a total amount not to exceed $315,495.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2124-180, entitled "The Effects of Multi-day Exposure to Nitrogen Dioxide on Human Cellular Immunity," submitted by the University of California, San Francisco, for a total amount not to exceed $315,495.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $315,495.

I hereby certify that the above is a true and correct copy of Resolution 94-17, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-18
March 10, 1994

Agenda Item No.: 94-3-2

WHEREAS, the Air Resources Board has been directed to design and implement a comprehensive program of research and monitoring of acid deposition in California, pursuant to Health and Safety Code Sections 39900 through 39911; and

WHEREAS, an unsolicited research proposal, Number 251-49 entitled "Development of a Computationally Efficient Acid Deposition Model for California," has been submitted by the California Institute of Technology; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Scientific Advisory Committee on Acid Deposition has reviewed and recommends for funding:

> Proposal Number 251-49, entitled "Development of a Computationally Efficient Acid Deposition Model for California," submitted by the California Institute of Technology, for a total amount not to exceed $299,983;

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39904, hereby accepts the recommendation of the Scientific Advisory Committee on Acid Deposition and approves the following:

> Proposal Number 251-49 entitled "Development of a Computationally Efficient Acid Deposition Model for California," submitted by the California Institute of Technology, for a total amount not to exceed $299,983.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $299,983.

I hereby certify that the above is a true and correct copy of Resolution 94-18, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California
AIR RESOURCES BOARD

Notice of Decision and
Response to Significant Environmental Issues

Item: PUBLIC HEARING TO CONSIDER ADOPTION OF PERMIT FEE REGULATIONS FOR NONVEHICULAR SOURCES PURSUANT TO THE CALIFORNIA CLEAN AIR ACT

Approved by: Resolution 94-19

Adopted by: Executive Order G-94-057
Signed: **September 15, 1994**

Agenda Item: 94-4-1

Public Hearing Date: April 14, 1994

Issuing Authority: Air Resources Board

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

Response: N/A

Certified:

Artavia M. Edwards
Regulations Coordinator

Date: 15 Sep 94

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Office of the Secretary
OCT 12 1994
RESOURCES AGENCY OF CALIFORNIA

State of California
AIR RESOURCES BOARD

Resolution 94-19

April 14, 1994

Agenda Item No.: 94-4-1

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

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

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

WHEREAS, the California Clean Air Act directs the Board to perform numerous tasks related to both vehicular and nonvehicular sources of air pollution;

WHEREAS, section 39612 of the Health and Safety Code authorizes the Board to require air pollution control and air quality management districts ("districts"), beginning July 1, 1989, to impose additional permit fees on nonvehicular sources which emit 500 tons per year or more of any nonattainment pollutant or its precursors in order to recover costs of additional state programs related to nonvehicular sources authorized or required by the Act;

WHEREAS, the Board staff has conferred with representatives of local districts and with their assistance has developed a proposed fee program which specifies the amount of fees to be collected by each district for transmission to the Board;

WHEREAS, the proposed fee regulations have been designed to provide the Board with net revenues of three million dollars ($3,000,000) to cover budgeted expenses for Fiscal Year 1994-95 of implementing nonvehicular source related activities under the Act;

WHEREAS, the proposed fee regulations provide that any excess fees collected shall be carried over and considered when setting fees in future years;

WHEREAS, the proposed fee regulations specify by district the amount to be transmitted to the Board for deposit in the Air Pollution Control Fund in

Fiscal Year 1994-95 and authorize each district to assess additional fees to recover the administrative costs to the district of collecting the fees;

WHEREAS, pursuant to section 39612 of the Health and Safety Code the proposed fee program for Fiscal Year 1994-95 is based on emissions of nonattainment pollutants or their precursors, as provided in the Act, using the most current statewide emission data available from the districts, which are for calendar year 1992;

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

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

WHEREAS, the Board finds that:

The funds which would be collected pursuant to the proposed fee regulations are needed to implement the nonvehicular source related programs established pursuant to the California Clean Air Act;

The excess fees collected in Fiscal Year 1992-93 have been carried over and considered in the calculation of fees in the proposed regulation;

The proposed fee regulations are based on annual emissions of nonattainment pollutants from facilities that emit 500 tons per year or more of any nonattainment pollutant or its precursors based on the most recent statewide data available;

The proposed fee regulations will not affect the creation or elimination of jobs within the State of California, the creation of new businesses or the elimination of existing businesses within California, the expansion of businesses currently doing business within California, or the ability of California Businesses to compete with businesses in other states;

The proposed fee regulations will not have a significant adverse economic impact on either the affected sources, on other businesses or private persons affected, or on the districts, which are authorized to recover the administrative costs of collecting the fees; and

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

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves sections 90800.5 and 90803, Title 17, California Code of Regulations, as set forth in Attachment A hereto.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to adopt sections 90800.5 and 90803, Title 17, California Code of Regulations, after making them available to the public for a period of 15 days, provided that the Executive Officer shall consider such written comments as may be submitted during this period, shall make modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if he determines that this is warranted.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to forward the attached regulations to the affected districts for appropriate action, and to the Department of Finance, the Legislative Analyst, and the State Controller, for information and for appropriate action.

BE IT FURTHER RESOLVED that the Board gives notice of its intention to review the status of the program to implement the provisions of the California Clean Air Act in 1995, and to reconsider at that time the renewal and modification, as necessary, of the fee program in order to reflect changes in program needs and capabilities, base year emissions, and such other factors as may influence funding requirements of the Act.

I hereby certify that the above is a true and correct copy of Resolution 94-19, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

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Office of the Secretary
OCT 12 1994
RESOURCES AGENCY OF CALIFORNIA

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER G-94-057

WHEREAS, on April 14, 1994, the Air Resources Board (the "Board") conducted a public hearing to consider the adoption and amendments to its permit fee regulations for nonvehicular sources pursuant to the California Clean Air Act;

WHEREAS, following the public hearing, the Board adopted Resolution 94-19, in which the Board approved adoption of section 90800.5, and amendments to section 90803, Title 17, California Code of Regulations (CCR), as set forth in Attachment A thereto;

WHEREAS, Resolution 94-19 directed the Executive Officer to adopt and amend the regulations, after making them available to the public for 15 days, provided that the Executive Officer shall consider such written comments regarding the changes in the regulations as originally proposed as may be submitted during this period, shall make such modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration, if he determines that this is warranted;

WHEREAS, the approved regulations were available for public comment for a period of 15 days in accordance with the provisions of Title 1, CCR, section 44, with the changes to the originally proposed text clearly indicated;

WHEREAS, it was determined that emission quantification errors should be considered in relieving districts from a portion of the fees, and the additional modifications were made available for public comment for a period of 15 days with the changes to the originally proposed text clearly indicated; and

WHEREAS, no written comments were received during this 30-day comment period.

NOW, THEREFORE, IT IS ORDERED that the recitals and findings contained in Resolution 94-19 are incorporated herein.

IT IF FURTHER ORDERED that section 90800.5 is adopted and section 90803 is hereby amended, as set forth in Attachment A hereto.

Executed this 15th day of September, 1994, at Sacramento, California.

James D. Boyd
Executive Officer

Attachment

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OCT 12 1994
RESOURCES AGENCY OF CALIFORNIA

94-20
Withdrawn
No Resolution

State of California

AIR RESOURCES BOARD

Resolution 94-21
April 14, 1994

Agenda Item No.: 94-4-4

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, a solicited research proposal, Number 2140-181, entitled "Reclamation of Automotive Batteries: Assessment of Health Impacts and Recycling Technology" has been submitted by the Acurex Environmental Corporation; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2140-181, entitled "Reclamation of Automotive Batteries: Assessment of Health Impacts and Recycling Technology" submitted by the Acurex Environmental Corporation, for a total amount not to exceed $74,580

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2140-181, entitled "Reclamation of Automotive Batteries: Assessment of Health Impacts and Recycling Technology," submitted by the Acurex Environmental Corporation, for a total amount not to exceed $74,580

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $74,580.

I hereby certify that the above is a true and correct copy of Resolution 94-21, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

94-22
Withdrawn
No Resolution

94-23
Withdrawn
No Resolution

State of California

AIR RESOURCES BOARD

Resolution 94-24
April 14, 1994

Agenda Item No.: 94-4-4

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, a solicited research proposal, Number 2155-181, entitled "Planning, Coordination, and Field Management of the 1996 Southern California Ozone Monitoring Program," has been submitted by the Desert Research Institute; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2155-181, entitled "Planning, Coordination, and Field Management of the 1996 Southern California Ozone Monitoring Program," submitted by the Desert Research Institute, for a total amount not to exceed $199,997.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2155-181, entitled "Planning, Coordination, and Field Management of the 1996 Southern California Ozone Monitoring Program," submitted by the Desert Research Institute, for a total amount not to exceed $199,997.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not exceed $199,997.

I hereby certify that the above is a true and correct copy of Resolution 94-24, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

94-25
Withdrawn
No Resolution

State of California

AIR RESOURCES BOARD

Resolution 94-26
April 14, 1994

Agenda Item No.: 94-4-4

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, a research proposal, Number 2127-180, entitled "Development of a Meteorological and Air Quality Information System for the Greater San Joaquin Valley," has been submitted by the California State University, Chico Foundation; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2127-180, entitled "Development of a Meteorological and Air Quality Information System for the Greater San Joaquin Valley," submitted by the California State University, Chico Foundation, for a total amount not to exceed $49,885.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2127-180, entitled "Development of a Meteorological and Air Quality Information System for the Greater San Joaquin Valley," submitted by the California State University, Chico Foundation, for a total amount not to exceed $49,885.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $49,885.

I hereby certify that the above is a true and correct copy of Resolution 94-26, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-27
April 14, 1994

Agenda Item No.: 94-4-4

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, an unsolicited research proposal, Number 2153-181, entitled "Characterization and Control of Organic Compounds Emitted from Air Pollution Sources," has been submitted by the California Institute of Technology; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2153-181, entitled "Characterization and Control of Organic Compounds Emitted from Air Pollution Sources," submitted by the California Institute of Technology, for a total amount not to exceed $392,789.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2153-181, entitled "Characterization and Control of Organic Compounds Emitted from Air Pollution Sources," submitted by the California Institute of Technology, for a total amount not to exceed $392,789.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $392,789.

I hereby certify that the above is a true and correct copy of Resolution 94-27, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-28
April 14, 1994

Agenda Item No.: 94-4-4

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, an unsolicited research proposal, Number 2158-181, entitled "Development and Field Test of a Two-Dimensional Vertically Scanning Ozone Lidar," has been submitted by the Environmental Technologies Laboratory of the National Oceanic and Atmospheric Administration; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2158-181, entitled "Development and Field Test of a Two-Dimensional Vertically Scanning Ozone Lidar," submitted by the National Oceanic and Atmospheric Administration, for a total amount not to exceed $110,482.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2158-181, entitled "Development and Field Test of a Two-Dimensional Vertically Scanning Ozone Lidar," submitted by the National Oceanic and Atmospheric Administration, for a total amount not to exceed $110,482.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $110,482.

I hereby certify that the above is a true and correct copy of Resolution 94-28, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-29
April 14, 1994

Agenda Item No.: 94-4-4

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, an interagency research proposal, Number 2157-181, entitled "Pulmonary Macrophage Release of Inflammatory Cytokines After Multi-day Exposure to Ozone and Nitric Acid," has been submitted by the University of California, San Francisco; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2157-181, entitled "Pulmonary Macrophage Release of Inflammatory Cytokines After Multi-day Exposure to Ozone and Nitric Acid," submitted by the University of California, San Francisco, for a total amount not to exceed $57,998.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2157-181, entitled "Pulmonary Macrophage Release of Inflammatory Cytokines After Multi-day Exposure to Ozone and Nitric Acid," submitted by the University of California, San Francisco, for a total amount not to exceed $57,998.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $57,998.

I hereby certify that the above is a true and correct copy of Resolution 94-29, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-30
April 14, 1994

Agenda Item No.: 94-4-4

WHEREAS, the Air Resources Board has been directed to design and implement a comprehensive program of research and monitoring of acid deposition in California, pursuant to Health and Safety Code Sections 39900 through 39911; and

WHEREAS, a sole source research proposal, Number 257-51, entitled "A Critical Assessment of the Health Effects of Atmospheric Acidity," has been submitted by New York University; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Scientific Advisory Committee on Acid Deposition has reviewed and recommends for funding:

> Proposal Number 257-51, entitled "A Critical Assessment of the Health Effects of Atmospheric Acidity," submitted by New York University, for a total amount not to exceed $69,419.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39904, hereby accepts the recommendation of the Scientific Advisory Committee on Acid Deposition and approves the following:

> Proposal Number 257-51, entitled "A Critical Assessment of the Health Effects of Atmospheric Acidity," submitted by New York University, for a total amount not to exceed $69,419.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $69,419.

I hereby certify that the above is a true and correct copy of Resolution 94-30, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-31
April 14, 1994

Agenda Item No.: 94-4-4

WHEREAS, the Air Resources Board has been directed to design and implement a comprehensive program of research and monitoring of acid deposition in California pursuant to Health and Safety Code Sections 39900 through 39911; and

WHEREAS, a sole source research proposal, Number 261-52, entitled "California Acid Deposition Monitoring Program Data Validation and Analysis," has been submitted by Charles Blanchard; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Scientific Advisory Committee on Acid Deposition has reviewed and recommends for funding:

> Proposal Number 261-52, entitled "California Acid Deposition Monitoring Program Data Validation and Analysis," submitted by Charles Blanchard, for a total amount not to exceed $14,900;

NOW THEREFORE BE IT RESOLVED that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39904, hereby accepts the recommendation of the Scientific Advisory Committee on Acid Deposition and approves the following:

> Proposal Number 261-52, entitled "California Acid Deposition Monitoring Program Data Validation and Analysis," submitted by Charles Blanchard, for a total amount not to exceed $14,900.

BE IT FURTHER RESOLVED that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $14,900.

I hereby certify that the above is a true and correct copy of Resolution 94-31, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-32
April 14, 1994

Agenda Item No.: 94-4-4

WHEREAS, the Air Resources Board has been directed to design and implement a comprehensive program of research and monitoring of acid deposition in California pursuant to Health and Safety Code Sections 39900 through 39911; and

WHEREAS, an interagency research proposal, Number 258-52, entitled "Evaluation Study of Nitric Acid Measurement of CADMP Sampler," has been submitted by the University of California, Riverside; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Scientific Advisory Committee on Acid Deposition has reviewed and recommends for funding:

> Proposal Number 258-52, entitled "Evaluation Study of Nitric Acid Measurement of CADMP Sampler," submitted by the University of California, Riverside, for a total amount not to exceed $104,803.

NOW THEREFORE BE IT RESOLVED that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39904, hereby accepts the recommendation of the Scientific Advisory Committee on Acid Deposition and approves the following:

> Proposal Number 258-52, entitled "Evaluation Study of Nitric Acid Measurement of CADMP Sampler," submitted by the University of California, Riverside, for a total amount not to exceed $104,803.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $104,803.

I hereby certify that the above is a true and correct copy of Resolution 94-32, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-33
April 14, 1994

Agenda Item No.: 94-4-4

WHEREAS, the Air Resources Board has been directed to design and implement a comprehensive program of research and monitoring of acid deposition in California pursuant to Health and Safety Code Sections 39900 through 39911; and

WHEREAS, an interagency research proposal, Number 262-52 entitled "Atmospheric Deposition to Agricultural Soils," has been submitted by the University of California, Riverside; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Scientific Advisory Committee on Acid Deposition has reviewed and recommends for funding:

> Proposal Number 262-52, entitled "Atmospheric Deposition to Agricultural Soils," submitted by the University of California, Riverside, for a total amount not to exceed $9,904.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39904, hereby accepts the recommendation of the Scientific Advisory Committee on Acid Deposition and approves the following:

> Proposal Number 262-52, entitled "Atmospheric Deposition to Agricultural Soils," submitted by the University of California, Riverside, for a total amount not to exceed $9,904.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $9,904.

I hereby certify that the above is a true and correct copy of Resolution 94-33, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-34
April 14, 1994

Agenda Item No.: 94-4-4

WHEREAS, the Air Resources Board has been directed to design and implement a comprehensive program of research and monitoring of acid deposition in California, pursuant to Health and Safety Code Sections 39900 through 39911; and

WHEREAS, an interagency research proposal, Number 259-52, entitled "Modification of Ozone Effects by Acidic Particles," has been submitted by the University of California, San Francisco; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Scientific Advisory Committee on Acid Deposition has reviewed and recommends for funding:

> Proposal Number 259-52, entitled "Modification of Ozone Effects by Acidic Particles," submitted by the University of California, San Francisco, for a total amount not to exceed $97,000.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39904, hereby accepts the recommendation of the Scientific Advisory Committee on Acid Deposition and approves the following:

> Proposal Number 259-52, entitled "Modification of Ozone Effects by Acidic Particles," submitted by the University of California, San Francisco, for a total amount not to exceed $97,000.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $97,000.

I hereby certify that the above is a true and correct copy of Resolution 94-34, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-35
April 14, 1993

Agenda Item No.: 94-4-4

WHEREAS, the Air Resources Board has been directed to design and implement a comprehensive program of research and monitoring of acid deposition in California pursuant to Health and Safety Code Sections 39900 through 39911; and

WHEREAS, an interagency research proposal, Number 260-52, entitled "Atmospheric Acidity Protection Program Assessment Workshop," has been submitted by the University of California, Irvine; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Scientific Advisory Committee on Acid Deposition has reviewed and recommends for funding:

> Proposal Number 260-52, entitled "Atmospheric Acidity Protection Program Assessment Workshop," submitted by the University of California, Irvine, for a total amount not to exceed $46,476.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39904, hereby accepts the recommendation of the Scientific Advisory Committee on Acid Deposition and approves the following:

> Proposal Number 260-52, entitled "Atmospheric Acidity Protection Program Assessment Workshop," submitted by the University of California, Irvine, for a total amount not to exceed $46,476.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $46,476.

I hereby certify that the above is a true and correct copy of Resolution 94-35, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

94-36
Not Used
No Resolution

State of California
AIR RESOURCES BOARD
Resolution 94-37

WHEREAS, Gladys Meade has served with the American Lung Association for the last 20 years, most recently as Executive Director of its California organization, and was instrumental in placing its emphasis on air polution control and the enhancement of air quality;

WHEREAS, Gladys' merciless battles with the air pollution dragon have spanned the years from the birth of NOx retrofit to the dawn of clean fuels, typifying the evolution from pollution control to pollution prevention, a process in which she has been a key figure;

WHEREAS, Gladys' unwavering commitment, inexhaustable energy, boundless creativity, and unquenchable good humor have enabled her to organize, educate, and direct the clean air efforts of numerous national, state, and local organizations;

WHEREAS, Gladys has prominently served the public interest on many environmental and air quality boards, including the Air Resources Board and the South Coast Air Quality Management District, where she always remained grounded in the community and has ever been a voice of the people;

WHEREAS, Gladys' gracious, modest, courteous, and generous manner has shed welcome light rather than heat on difficult air quality issues before this Board, and has assured that her thoroughly researched and informed positions would receive their deserved respect and consideration;

WHEREAS, Gladys' keen intelligence, unassailable integrity, peerless expertise, calm perseverance, and skill at communication make her the undisputed diva of clean air advocacy in California;

WHEREAS, Gladys is retiring from the Lung Association but will continue to lend her extensive knowledge of air pollution issues to the benefit of all Californians.

NOW, THEREFORE, BE IT RESOLVED that the Board enthusiastically commends Gladys Meade for her significant contributions to healthy air and expresses its deep appreciation for her selfless and ceaseless efforts.

BE IT FURTHER RESOLVED that the Board wishes Gladys a happy and productive retirement in which clean air and healthy lungs may continue to play an important role.

Jacqueline E. Schafer, Chairwoman

Brian P. Bilbray, Member

John S. Lagarias, Member

Eugene A. Boston, M.D., Member

Jack C. Parnell, Member

Joseph C. Calhoun, Member

Barbara Riordan, Member

Lynne Edgerton, Member

Dougla[illegible] Vagim, Member

M. Patricia Hilligoss, Member

Harriett M. Wieder, Member

STATE OF CALIFORNIA
AIR RESOURCES BOARD
2020 L STREET
P.O. BOX 2815
SACRAMENTO, CA 95812

PETE WILSON, Governor

Notice of Decision and Response to Significant Environmental Issues

Item: Notice of Public Hearing to Consider Amendments to the California Phase 2 Reformulated Gasoline Regulations Including Amendments Providing for the Use of a Predictive Model

Adopted by: Executive Order G-95-018
Signed: April 20, 1995

Approved by: Resolution 94-38

Agenda Item No.: 94-6-2

Public Hearing Date: June 9, 1994

Issuing Authority: Air Resources Board

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

Response: N/A

Certified: _____
Artavia M. Edwards
Regulations Coordinator

Date: 21 Apr 95

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APR 21 1995
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State of California
AIR RESOURCES BOARD

Executive Order G-95-018

WHEREAS, on June 9, 1994, the Air Resources Board (the Board) conducted a public hearing to consider the adoption of amendments to the California Phase 2 reformulated gasoline (Phase 2 RFG) regulations which allow the use of a predictive model to evaluate and approve alternative Phase 2 RFG formulations, and which modify several sections of the Phase 2 RFG regulations to facilitate their implementation;

WHEREAS, following the public hearing on June 9, 1994, the Board adopted Resolution 94-38, in which the Board approved the amendments to sections 2260, 2261, 2262.2, 2262.3, 2262.4, 2262.5, 2262.6, 2262.7, 2264 and 2270, and the adoption of sections 2264.2 and 2265, in Title 13, California Code of Regulations, as set forth in Attachment A thereto, and approved the adoption of the "California Procedures for Evaluating Alternative Specifications for Phase 2 Reformulated Gasoline Using the California Predictive Model," as set forth in Attachment B thereto, with the modifications to the above amendments and incorporated document described in Attachment C thereto;

WHEREAS, Resolution 94-38 directed the Executive Officer (a) to incorporate into the approved amendments and incorporated document the modifications approved therein with other conforming modifications he finds to be appropriate, (b) to make the modified text available to the public for a supplemental written comment period of 15 days, and then (c) either to adopt the modified amendments with such additional modifications as may be appropriate in light of supplemental comments received, or to present the regulations to the Board for further consideration if he determines that this is warranted;

WHEREAS, the modified text of the amendments to sections 2260 through 2270 (including the adoption of sections 2264.2, 2264.4, and 2265) of Title 13, California Code of Regulations, and the modified text of the "California Procedures for Evaluating Alternative Specifications for Phase 2 Reformulated Gasoline Using the California Predictive Model," with additional conforming revisions, and with the changes to the originally proposed texts clearly indicated, were made available to the public for a 15-day supplemental comment period ending March 21, 1995;

WHEREAS, five comment letters were received during the 15-day comment period, and the comments have been considered by the Executive Officer;

WHEREAS, Attachment A hereto contains the regulatory amendments and new sections that were made available for the 15-day supplemental comment period, with appropriate additional nonsubstantial modifications incorporated; and

WHEREAS, Attachment B hereto contains the text of the "California Procedures for Evaluating Alternative Specifications for Phase 2 Reformulated Gasoline Using the California Predictive Model" that was made available for the 15-day supplemental comment period, with appropriate additional nonsubstantial modifications.

NOW, THEREFORE, IT IS ORDERED that the recitals and findings contained in Resolution 94-38 are incorporated herein.

IT IS FURTHER ORDERED, in accordance with Resolution 94-38 and Health and Safety Code sections 39515 and 39516, that the amendments to Title 13, California Code of Regulations, sections 2260, 2261, 2262.2, 2262.3, 2262.4, 2262.5, 2262.6, 2262.7, 2264 and 2270, and new sections 2264.2, 2264.4 and 2265, are hereby adopted as set forth in Attachment A hereto, and the "California Procedures for Evaluating Alternative Specifications for Phase 2 Reformulated Gasoline Using the California Predictive Model," is hereby adopted as set forth in Attachment B hereto.

Executed this 20th day of April, 1995, at Sacramento, California.

Michael N. Scheible

for James D. Boyd
Executive Officer

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APR 21 1995
RESOURCES AGENCY OF CALIFORNIA

State of California
AIR RESOURCES BOARD

Resolution 94-38

June 9, 1994

Agenda Item No.: 94-6-2

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

WHEREAS, section 43018(a) of the Health and Safety Code, enacted by the California Clean Air Act of 1988, directs the Board to endeavor to achieve the maximum degree of emission reduction possible from vehicular and other mobile sources in order to accomplish the attainment of the state ambient air quality standards at the earliest practicable date;

WHEREAS, section 43018(b) of the Health and Safety Code directs the Board no later than January 1, 1992 to take whatever actions are necessary, cost-effective, and technologically feasible in order to achieve, by December 31, 2000, a reduction in motor vehicle emissions of reactive organic gases (ROG) of at least 55 percent and a reduction of motor vehicle emissions of oxides of nitrogen (NOx), and the maximum feasible reductions in particulates (PM), carbon monoxide (CO), and toxic air contaminants from vehicular sources;

WHEREAS, section 43018(c) of the Health and Safety Code provides that in carrying out section 43018, the Board shall adopt standards and regulations which will result in the most cost-effective combination of control measures on all classes of motor vehicles and motor vehicle fuel, including but not limited to specification of vehicular fuel composition;

WHEREAS, Health and Safety Code section 43013 authorizes the Board to adopt and implement motor vehicle fuel specifications for the control of air contaminants and sources of air pollution which the Board has found to be necessary, cost-effective, and technologically feasible to carry out the purposes of Division 26 of the Health and Safety Code;

WHEREAS, following a public hearing on November 21-22, 1991, the Board approved regulations for Phase 2 reformulated gasoline (Phase 2 RFG), applicable to gasoline sold in California for use in motor vehicles beginning March 1, 1996; these regulations include a comprehensive set of specifications affecting eight different gasoline properties and are designed to ensure that in-use gasoline is a significantly cleaner-burning fuel;

WHEREAS, the Phase 2 RFG regulations require that, for each of the eight regulated properties, producers and importers meet either "flat" or, if available, "averaging" limits when their gasoline is supplied from the production or import facility, and require that gasoline at any point in the distribution system not exceed "cap" limits for the properties;

WHEREAS, in Resolution 91-54 approving the Phase 2 RFG regulations, the Board directed the Executive Officer to continue work on the development of a predictive model that could be used to certify a set of alternative specifications that could be met to satisfy compliance with the Phase 2 RFG requirements, and to schedule a future rulemaking hearing for the Board to consider adoption of the predictive model;

WHEREAS, the staff has proposed amendments to the Phase 2 RFG regulations which would provide producers and importers of California gasoline the option of using the "California Predictive Model" to establish alternative Phase 2 RFG specifications that could be met in lieu of the specifications set forth in the Phase 2 RFG regulations, and which would identify the procedures and requirements for such use;

WHEREAS, the amendments proposed by the staff would also make a number of other changes to the Phase 2 RFG regulations, including extending the dates for compliance with the cap limits so that they apply starting April 15, 1996, to sales of gasoline from all facilities except for bulk plants, retail outlets, or bulk purchaser-consumer facilities, and apply throughout the distribution system starting June 1, 1996; allowing more frequent switching between the flat and averaging limits; allowing producers and importers initially to report the estimated volume of gasoline in a batch subject to designated alternative limits; requiring California refiners to comply with the Phase 2 RFG producer limits when producing gasoline that will be offered for sale at an out-of-state terminal where the fuel is identified as gasoline suitable for sale in California; and inserting an additional significant digit (to a tenth of a percent) for all references to the aromatic hydrocarbon content values;

WHEREAS, the California Environmental Quality Act and Board regulations require that an action not be adopted as proposed where it will have significant adverse environmental impacts if feasible alternatives or mitigation measures are available which would substantially reduce or avoid such impacts;

WHEREAS, the Board has considered the impact of the proposed amendments on the economy of the state;

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

WHEREAS, the Board finds that:

The California Predictive Model approved herein provides a technically sound means for determining the emissions impacts of alternative gasoline formulations in comparison to gasoline meeting the Phase 2 RFG specifications;

The regulatory amendments approved herein allowing the use of the California Predictive Model will provide producers and importers of California gasoline with additional flexibility and the opportunity to maximize production capabilities, better address conditions that may affect fuel supply, and reduce the operating costs of complying with the Phase 2 RFG regulations;

The amendments approved herein pertaining to the compliance dates for the "cap" limits will help provide for a smoother transition to Phase 2 RFG and help ensure that there is a continued adequate supply of gasoline in the state;

The other amendments approved herein will help gasoline producers effectively manage refinery operations and reduce burdens on small importers of gasoline;

The modifications to the California Predictive Model described in Attachment C hereto are necessary and appropriate to improve and simplify the Model;

The modifications described in Attachment C pertaining to limited extensions of the averaging period under the averaging compliance option are necessary and appropriate to afford additional flexibility in meeting the Phase 2 RFG requirements during the initial period of implementation;

No alternative has been identified to the Board which would be less costly than the amendments approved herein while being equally or more effective in achieving increments of air quality improvement in a manner that ensures full compliance with the statutory mandates in sections 43013 and 43018 of the Health and Safety Code;

While the Phase 2 RFG regulations approved herein are different from the reformulated gasoline regulations contained in the Federal Code of Regulations, the regulations approved herein are authorized by state law;

The ARB has worked with the United States Environmental Protection Agency and gasoline producers to effectively streamline the enforcement requirements of the federal reformulated gasoline regulations as they apply in California, and, as a result, the federal regulations exempt California producers from many of the federal enforcement

requirements from March 1, 1996 to January 1, 2000, as long as certain criteria are met; and

The amendments approved herein will not have any adverse impact on the economy of the state;

WHEREAS, the Board further finds that:

The amendments approved herein may result in a very small increase in emissions during March 1 to June 1, 1996 due to the extension of the cap limit compliance date for terminals, bulk plants, and service stations; however, any such emission increases would be insignificant because no changes are being made to the requirement that gasoline leaving production and import facilities must meet the Phase 2 RFG limits beginning March 1, 1996;

There is a possibility that the amendments approved herein may sometimes result in an increase in summertime CO emissions in 1996 and subsequent years when the predictive model is used because gasoline producers will not be required to demonstrate that there will be no increases in CO;

The requirement in the Phase 2 RFG regulations that all gasoline sold in the State contain a minimum of 1.8 percent oxygen by weight during the wintertime months will minimize CO emissions during the times when carbon monoxide concentrations are highest;

All areas of California are projected to be in attainment for the federal and state ambient air quality standards for CO by 1996 except Los Angeles County; the requirement in the federal reformulated gasoline regulations that all gasoline sold in Los Angeles County and most of the rest of Southern California contain a minimum of 2.0 percent oxygen by weight throughout the year will help minimize CO emissions and will fully mitigate any increase in CO emissions that could otherwise be associated with use of the California Predictive Model approved herein; and

In all other respects the amendments approved herein will not result in any significant adverse environmental impacts.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves the amendments to sections 2260, 2261, 2262.2, 2262.3, 2262.4, 2262.5, 2262.6, 2262.7, 2264, and 2270, and the adoption of sections 2264.2 and 2265, in Title 13, California Code of Regulations, as set forth in Attachment A hereto, and approves the adoption of the "California Procedures for Evaluating Alternative Specifications for Phase 2 Reformulated Gasoline Using the

California Predictive Model," as set forth in Attachment B hereto, with the modifications described in Attachment C hereto.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to incorporate into the approved regulations and incorporated document the modifications described in Attachment C hereto with such other conforming modifications as may be appropriate, and either to adopt the modified regulations, amendments, and new document after making them available to the public for a supplemental written comment period of 15 days, with such additional modifications as may be appropriate in light of supplemental comments received, or to present the regulations, amendments, and document to the Board for further consideration if he determines that this is warranted in light of supplemental written comments received.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to continue to work with the United States Environmental Protection Agency and with gasoline producers and marketers to ensure that the federal and California reformulated gasoline regulations continue to be implemented in an integrated manner that avoids unnecessary burdens on the regulated public.

I hereby certify that the above is a true and correct copy of Resolution 94-38, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

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DEC 21 1993
RESOURCES AGENCY OF CALIFORNIA

Resolution 94-38

June 9, 1994

Identification of Attachments to the Resolution

Attachment A: Proposed amendments to sections 2260, 2261, 2262.2, 2262.3, 2262.4, 2262.5, 2262.6, 2262.7, 2264, and 2270, and adoption of sections 2264.2 and 2265, in Title 13, California Code of Regulations, as set forth in Appendix A to the Staff Report.

Attachment B: The proposed "California Procedures for Evaluating Alternative Specifications for Phase 2 Reformulated Gasoline Using the California Predictive Model," as set forth in Appendix B to the Staff Report.

Attachment C: Staff's Suggested Changes to the Proposed Amendments to the California Reformulated Gasoline Regulations (distributed at the hearing on June 9, 1994).

State of California

AIR RESOURCES BOARD

Resolution 94-39
June 9, 1994

Agenda Item No.: 94-6-3

WHEREAS, the Legislature has declared that an effective research program is an integral part of the broad-based statewide effort to combat air pollution in California, pursuant to Health and Safety Code Section 39700;

WHEREAS, the Air Resources Board has been directed to administer and coordinate all air pollution research funded, in whole or in part, with state funds, pursuant to Health and Safety Code Section 39703;

WHEREAS, the Air Resources Board has been directed to establish objectives for air pollution research in California, pursuant to Health and Safety Code Section 39703;

WHEREAS, the Air Resources Board has been directed to appoint a Research Screening Committee to give advice and recommendations with respect to all air pollution research projects funded by the state, pursuant to Health and Safety Code Section 39705;

WHEREAS, the Research Screening Committee has reviewed and approved a report titled Planned Air Pollution Research: 1994 Update, for air pollution research in California; and

WHEREAS, The Air Resources Board has met with the Research Screening Committee and discussed the report.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703 and 39705, hereby concurs in the recommendation of the Research Screening Committee and approves the report Planned Air Pollution Research: 1994 Update.

I hereby certify that the above is a true and correct copy of Resolution 94-39, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-40
June 9, 1994

Agenda Item No. 94-6-4

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, a solicited research proposal, Number 2135-181, entitled "Solvent Cleaning/Degreasing Source Category Emission Inventory," has been submitted by E.H. Pechan and Associates; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2135-181, entitled "Solvent Cleaning/Degreasing Source Category Emission Inventory," submitted by E.H. Pechan and Associates, for a total amount not to exceed $174,175.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2135-181, entitled "Solvent Cleaning/Degreasing Source Category Emission Inventory," submitted by E.H. Pechan and Associates, for a total amount not to exceed $174,175.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $174,175.

I hereby certify that the above is a true and correct copy of Resolution 94-40, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

Air Resources Board

Resolution 94-41
June 9, 1994

Agenda Item No. 94-6-4

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, a solicited research proposal, Number 2149-181, entitled "Study to Redefine Cold- and Hot-Start Emissions," has been submitted by the GM Powertrain Division, GMC.

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2149-181, entitled "Study to Redefine Cold- and Hot-Start Emissions," submitted by GM Powertrain Division, GMC, for an amount not to exceed $549,577.

NOW, THEREFORE BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by the Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2149-181, entitled "Study to Redefine Cold- and Hot-Start Emissions," submitted by the GM Powertrain Division, GMC, for an amount not to exceed $549,577.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $549,577.

I hereby certify that the above is a true and correct copy of Resolution 94-41, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-42
June 9, 1994

Agenda Item No. 94-6-4

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, an unsolicited research proposal, Number 2129-181, entitled "Cardiovascular Effects of Controlled Ozone Exposure in Cardiac Patients," submitted by the Los Amigos Research and Education Institute; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2129-181, entitled "Cardiovascular Effects of Controlled Ozone Exposure in Cardiac Patients," submitted by the Los Amigos Research and Education Institute, for a total amount not to exceed $247,588.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2129-181, entitled "Cardiovascular Effects of Controlled Ozone Exposure in Cardiac Patients," submitted by the Los Amigos Research and Education Institute, for a total amount not to exceed $247,588.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $247,588.

I hereby certify that the above is a true and correct copy of Resolution 94-42, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-43
June 9, 1994

Agenda Item No. 94-6-4

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, an unsolicited research proposal, Number 2161-182, entitled "Prototype Demonstration of CHA NOx Removal Process for Treatment of Diesel Engine Exhaust," has been submitted by Sacramento Municipal Utility District; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2161-182, entitled "Prototype Demonstration of CHA NOx Removal Process for Treatment of Diesel Engine Exhaust," submitted by Sacramento Municipal Utility District, for a total amount not to exceed $15,000.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2161-182, entitled "Prototype Demonstration of CHA NOx Removal Process for Treatment of Diesel Engine Exhaust," submitted by Sacramento Municipal Utility District, for a total amount not to exceed $15,000.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $15,000.

I hereby certify that the above is a true and correct copy of Resolution 94-43, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-44
June 9, 1994

Agenda Item No. 94-6-4

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, an interagency research proposal, Number 2159-182, entitled "Industrial Surface Coatings - Wood-Furniture and Fixtures Emission Inventory Development," has been submitted by the University of California, Davis; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2159-182, entitled "Industrial Surface Coatings - Wood-Furniture and Fixtures Emission Inventory Development," submitted by the University of California, Davis, for a total amount not to exceed $120,137.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2159-182, entitled "Industrial Surface Coatings - Wood-Furniture and Fixtures Emission Inventory Development," submitted by the University of California, Davis, for a total amount not to exceed $120,137.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $120,137.

I hereby certify that the above is a true and correct copy of Resolution 94-44, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-45
June 9, 1994

Agenda Item No. 94-6-4

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, an interagency research proposal, Number 2160-182, entitled "Coating Operations Test Method and Method Development Survey," has been submitted by the University of California, Davis; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2160-182, entitled "Coating Operations Test Method and Method Development Survey," submitted by the University of California, Davis, for a total amount not to exceed $101,779.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2160-182, entitled "Coating Operations Test Method and Method Development Survey," submitted by the University of California, Davis, for a total amount not to exceed $101,779.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $101,779.

I hereby certify that the above is a true and correct copy of Resolution 94-45, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-46
June 9, 1994

Agenda Item No. 94-6-4

WHEREAS, the Air Resources Board has been directed to design and implement a comprehensive program of research and monitoring of acid deposition in California pursuant to Health and Safety Code Sections 39900 through 39911; and

WHEREAS, an interagency research proposal, Number 266-53, entitled "A Review of Nitric Acid Measurements by TDLAS," has been submitted by University of California, Riverside; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Scientific Advisory Committee on Acid Deposition has reviewed and recommends for funding:

> Proposal Number 266-53, entitled "A Review of Nitric Acid Measurements by TDLAS," submitted by University of California, Riverside, for a total amount not to exceed $32,129;

NOW THEREFORE BE IT RESOLVED that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39904, hereby accepts the recommendation of the Scientific Advisory Committee on Acid Deposition and approves the following:

> Proposal Number 266-53, entitled "A Review of Nitric Acid Measurements by TDLAS," submitted by University of California, Riverside, for a total amount not to exceed $32,129.

BE IT FURTHER RESOLVED that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $32,129.

I hereby certify that the above is a true and correct copy of Resolution 94-46, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-47
June 9, 1994

Agenda Item No. 94-6-4

WHEREAS, the Air Resources Board has been directed to design and implement a comprehensive program of research and monitoring of acid deposition in California pursuant to Health and Safety Code Sections 39900 through 39911; and

WHEREAS, an interagency research proposal, Number 265-53, entitled "Further Evaluation of a Two-Week Sampler for Acidic Gases and Fine Particles," has been submitted by University of California, Riverside; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Scientific Advisory Committee on Acid Deposition has reviewed and recommends for funding:

> Proposal Number 265-53, entitled "Further Evaluation of a Two-Week Sampler for Acidic Gases and Fine Particles," submitted by University of California, Riverside, for a total amount not to exceed $141,086;

NOW THEREFORE BE IT RESOLVED that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39904, hereby accepts the recommendation of the Scientific Advisory Committee on Acid Deposition and approves the following:

> Proposal Number 265-53, entitled "Further Evaluation of a Two-Week Sampler for Acidic Gases and Fine Particles," submitted by University of California, Riverside, for a total amount not to exceed $141,086.

BE IT FURTHER RESOLVED that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $141,086.

I hereby certify that the above is a true and correct copy of Resolution 94-47, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-48
June 9, 1994

Agenda Item No. 94-6-4

WHEREAS, the Air Resources Board has been directed to design and implement a comprehensive program of research and monitoring of acid deposition in California pursuant to Health and Safety Code Sections 39900 through 39911; and

WHEREAS, an interagency research proposal, Number 264-53, entitled "Evaluation of a Sampling Methodology for Acidic Species," has been submitted by University of California, Riverside; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Scientific Advisory Committee on Acid Deposition has reviewed and recommends for funding:

> Proposal Number 264-53, entitled "Evaluation of a Sampling Methodology for Acidic Species," submitted by University of California, Riverside, for a total amount not to exceed $311,767;

NOW THEREFORE BE IT RESOLVED that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39904, hereby accepts the recommendation of the Scientific Advisory Committee on Acid Deposition and approves the following:

> Proposal Number 264-53, entitled "Evaluation of a Sampling Methodology for Acidic Species," submitted by University of California, Riverside, for a total amount not to exceed $311,767.

BE IT FURTHER RESOLVED that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $311,767.

I hereby certify that the above is a true and correct copy of Resolution 94-48, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California
AIR RESOURCES BOARD

Resolution 94-49

June 9, 1994

Agenda Item: 94-6-5

WHEREAS, Health and Safety Code sections 39600 and 39605 authorize the Air Resources Board (Board) to act as necessary to execute the powers and duties granted to and imposed upon the Board and to assist the local air pollution control and air quality management districts (Districts);

WHEREAS, Health and Safety Code section 40910 requires the attainment plans developed by the Districts in response to the California Clean Air Act to focus particular attention on reducing emissions from transportation sources, and Health and Safety Code section 40717 requires Districts to adopt, implement, and enforce transportation control measures as necessary to attain state and national ambient air quality standards;

WHEREAS, Health and Safety Code section 40716 authorizes the Districts to adopt and implement regulations to encourage or require the use of ridesharing, vanpooling, and other measures to reduce the number or length of vehicle trips;

WHEREAS, several Districts have adopted or plan to adopt employer-based trip reduction rules which require that employers with 100 or more employees develop and implement trip reduction plans to decrease the number of solo-occupant vehicles arriving at the worksite;

WHEREAS, Health and Safety Code section 39603(a) authorizes the Board to appoint advisory groups and committees as it deems necessary;

WHEREAS, Health and Safety Code sections 39613(a) and (b) require the Board to convene a 15-member Technical Review Group (hereinafter referred to as the "Advisory Committee") to develop consistent definitions for employer-based trip reduction rules for statewide use by Districts and congestion management agencies as defined in Government Code section 65088 et. seq.;

WHEREAS, on November 18, 1994 the Air Resources Board appointed fifteen individuals to the Advisory Committee representing business, labor, local governments, and environmental interests, consistent with section 39613(b);

WHEREAS, the Advisory Committee held five public meetings at which they developed recommendations;

WHEREAS, Health and Safety Code section 39613(c) lists twenty ridesharing terms that are to be defined by the Advisory Committee to the extent needed, and authorizes the Committee to define additional terms as it deems necessary;

WHEREAS, the Advisory Committee developed definitions for twenty-one separate ridesharing terms: thirteen from section 39616(c) and eight additional terms added by the Committee;

WHEREAS, Health and Safety Code sections 39613(e) and (f), respectively, require that the recommended definitions be submitted to the Board by April 1, 1994 and that the Board approve the definitions it deems are needed on or before June 30, 1994;

WHEREAS, the Board finds:

1. The U.S. Environmental Protection Agency has published ridesharing definitions with specific requirements for determining the worksite employee threshold for employers in severe and extreme federal nonattainment areas that are more stringent than those in the definition recommended by the Advisory Committee.

2. The definition for "disabled employee" is not related to any other terms defined by the Advisory Committee, does not appear in most local ridesharing rules, and may be considered discriminatory by some members of the public.

3. Although not expressly stated in the Advisory Committee's definition of "employee transportation coordinator," air districts should be permitted to develop training requirements for "employee transportation coordinators" to best serve local needs.

4. Although not directly expressed in the Advisory Committee's definition of "compressed workweek," employers subject to district ridesharing rules should be permitted to choose applicable survey weeks to receive adequate credit for employees participating in a compressed workweek schedule.

5. A committee of experts in the field of data collection and analysis, as it relates to ridesharing, is needed to establish "standardized data reporting requirements."

6. The definitions developed by the Advisory Committee accomplish the intention of the statute and will provide consistency to ridesharing rules implemented by districts, congestion management agencies and others, to the benefit of those agencies and employers subject to those rules;

NOW, THEREFORE, BE IT RESOLVED, that the Board approves the definitions recommended by the Advisory Committee on Ridesharing with the following amendments and deletions:

- the definition of "worksite employee threshold" is approved with the understanding that it may be superseded in severe and extreme federal nonattainment areas;

- no action is taken on the definition of "disabled employee;"

- the definition of "employee transportation coordinator" is approved with the understanding that the definition does not prohibit training requirements;

- the definition of "compressed workweek" is approved with the understanding that employers may select the applicable survey week;

- the definition of "vehicle trip" is modified to include the following language at the end of that definition: "Zero-Emission Vehicles = 0," and

- the definition of "seasonal employee" is modified to add "or an agricultural employee who is employed for up to a continuous 16-week period" at the end of that definition.

BE IT FURTHER RESOLVED, that the Board directs staff to distribute the approved definitions to Districts and congestion management agencies throughout the state and to recommend and promote their incorporation into proposed and existing ridesharing rules;

BE IT FURTHER RESOLVED, that the Board directs staff to convene a technical committee to develop recommendations for standardized data reporting requirements for ridesharing rules, and that this committee should include participants from air districts, congestion management agencies, the State Department of Transportation, regional ridesharing agencies, private consultants, and interested members of the original Committee;

BE IT FURTHER RESOLVED, that the Board wishes to thank the members of the AB 1336 Advisory Committee on Ridesharing for their diligent and thoughtful service.

I hereby certify that the above is a true and correct copy of Resolution 94-49, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

STATE OF CALIFORNIA-CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY PETE WILSON, Governor
AIR RESOURCES BOARD
2020 L STREET
P.O. BOX 2815
SACRAMENTO, CA 95812

State of California
AIR RESOURCES BOARD

Notice of Decision and
Response to Significant Environmental Issues

Item: NOTICE OF PUBLIC HEARING TO CONSIDER AMENDMENTS TO THE EMISSION CONTROL REGULATIONS FOR 1995 AND LATER MODEL UTILITY AND LAWN AND GARDEN EQUIPMENT ENGINES.

Approved by: Resolution 94-50

Adopted by: Executive Order G-95-051
Dated: May 26, 1995

Agenda Item No.: 94-7-1

Public Hearing Date: July 28, 1994

Issuing Authority: Air Resources Board

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

Response: N/A

Certified:
Artavia M. Edwards
Regulations Coordinator

Date: 9 June 1995

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RESOURCES AGENCY OF CALIFORNIA

STATE OF CALIFORNIA—CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY PETE WILSON, *Governor*

AIR RESOURCES BOARD
2020 L STREET
P.O. BOX 2815
SACRAMENTO, CA 95814-2815

State of California
AIR RESOURCES BOARD

Notice of Decision and
Response to Significant Environmental Issues

Item: NOTICE OF PUBLIC HEARING TO CONSIDER AMENDMENTS TO THE EMISSION CONTROL REGULATIONS FOR 1995 AND LATER MODEL UTILITY AND LAWN AND GARDEN EQUIPMENT ENGINES.

Approved by: Resolution 94-50

Adopted by: Executive Order G-94-051
Dated: August 29, 1994

Agenda Item No.: 94-7-1

Public Hearing Date: July 28, 1994

Issuing Authority: Air Resources Board

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

Response: N/A

Certified: _____
Artavia M. Edwards
Regulations Coordinator

Date: 29 August 1994

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State of California
AIR RESOURCES BOARD

Executive Order G-95-041

WHEREAS, on July 28, 1994, the Air Resources Board (ARB) conducted a public hearing to consider proposed amendments to Title 13, California Code of Regulations, sections 2400-2407 and incorporated California Exhaust Emission Standards and Test Procedures for 1995 and Later Utility and Lawn and Garden Equipment Engines (Test Procedures);

WHEREAS, following the public hearing on July 28, 1994, the Board adopted Resolution 94-50, in which the Board approved the amendments to sections 2400-2407, Title 13, California Code of Regulations and the Test Procedures, as set forth in Attachments A thereto.

WHEREAS, Resolution 94-50 directed the Executive Officer to adopt the amendments as set forth in Attachment A thereto, with such conforming modifications as may be appropriate, after making the modified text available to the public for a supplemental written comment period of 15 days, provided that the Executive Officer shall consider such written comments regarding the modifications as may be submitted during this period, shall make modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if he determines that this is warranted;

WHEREAS, the text of sections 2400-2407, Title 13, California Code of Regulations and the incorporated Test Procedures were made available, in accordance with section 44, Title 1, California Code of Regulations, for a 15-day period during which comments on the modifications to the original proposed text were solicited; the text of the regulations and Test Procedures clearly indicated the modifications to the original proposal;

WHEREAS, one written comment was received during the 15-day comment period; the Executive Officer has considered the comment pertaining to the modifications to the original proposal and has determined that no further modifications are necessary or appropriate.

WHEREAS, in adopting Resolution 94-50 the Board approved the amendments to Part II, section 11(a)(1)(I) and Part III, section 4(a)(1)(I) of the Test Procedures pertaining to the types of petroleum-based certification test fuels that may be used by engine manufacturers for certification as proposed, without modifications and no supplemental comment period for this element of the amendments was necessary;

WHEREAS, the amendments pertaining to the types of petroleum-based certification test fuels that may be used by engine manufacturers for certification were adopted in Executive Order G-94-051, and are now in effect;

WHEREAS, the Final Regulation Order, attached hereto as Attachment A, contains the text of Part II, section 11(a)(1)(I) and Part III, section 4(a)(1)(I) of the Test Procedures, as it is now in effect and clearly indicates the other amendments approved by the Board in Resolution 94-50, with modifications that were made available in connection with the 15-day comment period, and which have not yet become effective.

NOW THEREFORE, IT IS ORDERED that the recitals and findings contained in Resolution 94-50 are incorporated herein.

IT IS FURTHER ORDERED, in accordance with Resolution 94-50 and Health and Safety Code sections 39515 and 39516, that the amendments to sections 2400-2407 and the incorporated Test Procedures are hereby adopted as set forth in Attachment A hereto.

Executed this 26th day of May, 1995, at Sacramento, California.

Michael N. Schaible
for James D. Boyd
Executive Officer

Attachment

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Office of the Secretary

JUN 13 1995

RESOURCES AGENCY OF CALIFORNIA

State of California
AIR RESOURCES BOARD

Executive Order G-94-051

WHEREAS, on July 28, 1994, the Air Resources Board (ARB) conducted a public hearing to consider proposed amendments to Title 13, California code of Regulations, sections 2400-2407 and incorporated California Exhaust Emission Standards and Test Procedures for 1995 and Later Utility and Lawn and Garden Equipment Engines (Test Procedures);

WHEREAS, following the public hearing on July 28, 1994, the Board adopted Resolution 94-50, in which the Board approved the amendments to sections 2400-2407, Title 13, California Code of Regulations and the Test Procedures, as set forth in Attachments A thereto.

WHEREAS, Resolution 94-50 directed the Executive Officer to adopt the amendments as set forth in Attachment A thereto, with such conforming modifications as may be appropriate, after making the modified text available to the public for a supplemental written comment period of 15 days, provided that the Executive Officer shall consider such written comments regarding the modifications as may be submitted during this period, shall make modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if he determines that this is warranted;

WHEREAS, in adopting Resolution 94-50 the Board approved the amendments to Part II, section 11(a)(1)(i) and Part III, section 4(a)(1)(i) of the Test Procedures pertaining to the types of petroleum-based certification test fuels that may be used by engine manufacturers for certification as proposed, without modifications and no supplemental comment period for this element of the amendments is necessary;

WHEREAS, the text of the amendments to section 2400-2407 and sections other than Part II, section 11(a)(1)(i) and Part III, section 4(a)(1)(i) of the Test Procedures approved by the Board with conforming modifications will be made available to the public for a supplemental comment period, no supplemental comment will be solicited for the portion of the amendments pertaining to the petroleum-based certification test fuel;

WHEREAS, Attachment A hereto sets forth the Board-approved amendments to Part II, section 11(a)(1)(i) and Part III, section 4(a)(1)(i) of the Test Procedures, pertaining to petroleum-based certification test fuels.

NOW THEREFORE, IT IS ORDERED that the recitals and findings contained in Resolution 94-50 are incorporated herein.

IT IS FURTHER ORDERED, in accordance with Resolution 94-50 and Health and Safety Code sections 39515 and 39516, that the amendments to Part II, section 11(a)(1)(i) and

Part III, section 4(a)(1)(i) of the Test Procedure are hereby adopted as set forth in Attachment A hereto.

IT IS FURTHER ORDERED that the Executive Officer shall take final action regarding the rest of the amendments approved by the Board at the July 28, 1994 hearing in a subsequent Executive Order.

Executed this 29th day of August, 1994, at Sacramento, California.

James D. Boyd
Executive Officer

Attachment

State of California
AIR RESOURCES BOARD

Resolution 94-50
July 28, 1994

Agenda Item No.: 94-7-1

WHEREAS, section 39003 of the Health and Safety Code charges the Air Resources Board (ARB) with coordinating efforts to attain and maintain ambient air quality standards;

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorize the ARB to adopt standards, rules and regulations and to do such acts as may be necessary for the proper execution of the powers and duties granted to and imposed upon the ARB by law;

WHEREAS, in section 43000.5 of the Health and Safety Code, the Legislature found and declared that despite significant reductions in vehicle emissions in recent years, continued growth in population and vehicle miles traveled throughout California have the potential not only to prevent attainment of the state standards, but in some cases, to result in worsening of air quality;

WHEREAS, section 43013 of the Health and Safety Code authorizes the ARB to adopt standards and regulations for the control of contaminants from off-road sources, including utility engines.

WHEREAS, section 43018 of the Health and Safety Code directs the ARB to achieve the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to accomplish the attainment of state standards at the earliest possible date;

WHEREAS, the ARB has adopted regulations under Title 13, California Code of Regulations (CCR) Section 2400, et seq. and procedures and documents to be incorporated by reference therein for 1995 and subsequent model utility and lawn and garden equipment engines, including emission standards, test procedures, emission control system warranties, enforcement procedures, and compliance testing;

WHEREAS, the staff has proposed amendments to the regulations under Title 13, CCR, Section 2400, et seq. and procedures and documents referenced therein for 1995 and subsequent model utility and lawn and garden equipment engines, including emission standards, test procedures, emission control system warranties, enforcement procedures, and compliance testing;

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

WHEREAS, pursuant to section 43013(e) of the Health and Safety Code and Government Code Sections 11346.53 and 11346.54, the ARB has considered the effects of the proposed amendments on the economy and businesses of the state, including the ability of businesses to compete with businesses in other states;

WHEREAS, section 209(e) of the Federal Clean Air Act (CAA), as amended in 1990, requires that the ARB receive authorization from the Administrator of the Environmental Protection Agency (EPA) to adopt and enforce standards relating to the control of emissions from nonroad engines or vehicles that are not otherwise preempted by federal law;

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

WHEREAS, the ARB finds that:

Modifications to the emission test procedures, and the requirements regarding emission control labels, defects warranty, assembly-line quality-audit and new engine compliance testing are necessary;

The proposed amendments would clarify and update the regulations and procedures, helping to ensure greater compliance with the emission standards;

The proposed amendments do not change the previously adopted utility engine emission standards, and accordingly, do not impact the emission reductions that should be achieved;

The proposed amendments will ensure consistency between the California and the test procedures that have been proposed by the EPA to regulate new nonroad spark-ignition engines at or below 19 kilowatts;

WHEREAS, the ARB has determined, in accordance with the California Environmental Quality Act and ARB regulations, that the proposed amendments to Title 13, CCR, sections 2400-2407 will not have significant adverse environmental impacts; and

WHEREAS, the reporting requirements of Title 13, CCR, sections 2403-2407, and the incorporated documents and procedures incorporated therein which apply to small businesses are necessary for the health, safety, and welfare of the people of the state;

NOW, THEREFORE, BE IT RESOLVED that the ARB hereby approves for adoption the proposed regulations in Title 13, CCR, sections 2400-2407 and the test

procedures and other requirements incorporated therein as amended at the hearing, as set forth in Attachment A;

BE IT FURTHER RESOLVED that the ARB directs the Executive Officer to adopt Title 13, CCR, sections 2400-2407 and the test procedures and other requirements incorporated therein after making substantive modifications to the text available to the public for a period of 15 days provided that the Executive Officer shall consider such written comments as may be submitted during this period, shall make modifications as may be appropriate in light of the comments received, and shall present the regulations to the ARB for further consideration if he determines that this is warranted.

BE IT FURTHER RESOLVED that the ARB hereby determines that the regulations that have been adopted to date and the amendments to the regulations approved for adoption herein will not cause the California emission standards, in the aggregate, to be less protective of public health and welfare than applicable federal standards; that California needs such standards to meet compelling and extraordinary conditions within the State; that the standards and accompanying enforcement procedures are not inconsistent with the Federal Clean Air Act, as amended.

BE IT FURTHER RESOLVED that the Executive Officer shall forward the regulations and amendments to regulations approved for adoption herein to the Administrator of EPA with a request that California be given authorization to adopt and enforce such provisions.

I hereby certify that the above is a true and correct copy of Resolution 94-50, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

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Office of the Secretary

JUN 13 1995

RESOURCES AGENCY OF CALIFORNIA

STATE OF CALIFORNIA
AIR RESOURCES BOARD
2020 L STREET
P.O. BOX 2815
SACRAMENTO, CA 95812

PETE WILSON, Governor

Notice of Decision and Response to Significant Environmental Issues

Item: Notice of Public Hearing to Consider Adoption of Amendments to the Air Toxics "Hot Spots" Program Fee Regulation for Fiscal Year 1994-95

Adopted by: Executive Order G-95-027
Signed: April 7, 1995

Approved by: Resolution 94-51

Agenda Item No.: 94-7-2

Public Hearing Date: July 28, 1994

Issuing Authority: Air Resources Board

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

Response: N/A

Certified:
Artavia M. Edwards
Regulations Coordinator

Date: 24 Apr 95

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RESOURCES AGENCY OF CALIFORNIA

EXECUTIVE ORDER G-95-027

WHEREAS, on July 28, 1994, the Air Resources Board (the "Board") conducted a public hearing to consider amendments to the Air Toxics "Hot Spots" Program Fee Regulation for Fiscal Year 1994-95, set forth in sections 90700-90705, and Appendix A, Titles 17 and 26, California Code of Regulations (CCR);

WHEREAS, following the public hearing of, the Board adopted Resolution 94-51, in which the Board approved amendment of sections 90700-90705, and Appendix A, Titles 17 and 26, CCR, as set forth in Attachment A thereto, as modified in accordance with the Board's direction;

WHEREAS, Resolution 94-51 directed the Executive Officer to amend the regulations, after making them available to the public for a period of 15 days, provided that the Executive Officer shall consider such written comments as may be submitted during this period, shall make modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if he determines that this is warranted;

WHEREAS, the approved regulations were available for public comment for a period of 15 days, with the changes to the originally proposed text clearly indicated, in accordance with the provisions of Title 1, CCR, section 44;

WHEREAS, the written comments received during this 15-day period have been considered by the Executive Officer and do not require modification nor reconsideration by the Board of the approved regulations; and

WHEREAS, the reporting requirements of the approved regulations which apply to small businesses are necessary for the health, safety, and welfare of the people of the state.

NOW, THEREFORE, IT IS ORDERED that the recitals and findings contained in Resolution 94-51 are incorporated herein.

IT IS FURTHER ORDERED that sections 90700 through 90705, and Appendix A, Titles 17 and 26, CCR, are amended as set forth in Attachment 1 hereto.

Executed this 27th day of April, 1995, at Sacramento, California.

James D. Boyd
Executive Officer

Attachment

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APR 24 1995
RESOURCES AGENCY OF CALIFORNIA

State of California
AIR RESOURCES BOARD

Resolution 94-51

July 28, 1994

Agenda Item No.: 94-7-2

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

WHEREAS, the Legislature found in the Air Toxics "Hot Spots" Information and Assessment Act of 1987 ("the Act", Health and Safety Code section 44300 et seq.) that facilities manufacturing or using hazardous substances may be exposing nearby populations to toxic air releases on a routine basis and that it is in the public interest to ascertain the nature and quantity of hazardous releases from specific sources which may create air toxics "hot spots";

WHEREAS, the Act sets forth a program to develop air toxics emission inventories and to assess the risk to public health from exposure to these emissions;

WHEREAS, November 14, 1988, effective December 15, 1988, the Board adopted the Fee Regulation set forth in section 90700 et seq. of Title 17 of the California Code of Regulations pursuant to Health and Safety Code section 44380(a), which assessed a fee upon the operator of every facility subject to the Act in order to recover the costs to the Board, local air pollution control districts ("districts"), and the Department of Health Services (hereinafter the Office of Environmental Health Hazard Assessment, or the "Office") to implement and administer the Act;

WHEREAS, the Board has amended the Fee Regulation each year since 1988 to reflect changes in the emission inventory, the sources subject to the Act's requirements, and the State and district costs of implementing the Act;

WHEREAS, Health and Safety Code section 44380(a) was amended in 1990 to require that the Board adopt a regulation which requires all districts, except for districts that have submitted specified information to the Board prior to April 1 of each year, to adopt rules which assess a fee upon the operator of every facility subject to the Act in order to recover the costs to the Districts, the Board and the Office to implement and administer the Act, and this Fee Regulation was amended accordingly on May 20, 1994, effective June 28, 1994;

WHEREAS, the amendments to the 1993-94 fee schedule approved by the Board on July 8, 1993, and adopted by the Board on May 20, 1994, set forth in section 90700 et seq. of Title 17 of the California Code of Regulations pursuant to Health and Safety Code section 44380(a), provided for the assessment of a fee upon the operator of every facility subject to the Act in order to recover the costs to the Board, local air pollution control districts, and the Office to implement and administer the Act in fiscal year 1993-94;

WHEREAS, Board staff, in consultation with the districts and the fee regulation committee originally convened pursuant to the 1987 Act, has developed amendments to the fee regulation for fiscal year 1994-95 which were discussed with the public at three public consultation meetings;

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

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

WHEREAS, changes have been proposed to the originally noticed text of the regulations based on information presented by the Districts regarding costs of implementing the Act and facility program categories, among other things;

WHEREAS, based upon the information presented by the staff and the written and oral comments received prior to and at the hearing, the Board finds that:

1. The proposed amendments would allocate State costs among the districts based on facility program categories;

2. The Imperial, Kern, Lassen, Mariposa, Santa Barbara, and Tuolumne County Air Pollution Control Districts (APCDs), the Great Basin and San Joaquin Valley Unified APCDs, and the Mendocino County, Mojave Desert, South Coast, and Yolo-Solano County Air Quality Management Districts (AQMDs) have requested that the Board adopt a fee schedule for them, and have submitted to the Air Resources Board the districts' program costs, approved by the district boards, prior to April 1, 1994, and that for these districts, the proposed amendments to the fees in the regulation are based on program costs approved by the district boards and on facility program categories; or on fees otherwise determined by the district to be reasonable for facilities designated as Survey or Industrywide;

3. The Amador, Butte, Calaveras, Colusa, El Dorado, Glenn, Modoc, Northern Sonoma, Placer, San Diego, San Luis Obispo, Shasta, Siskiyou, Tehama and Ventura County APCDs, the Feather River and Monterey Bay Unified APCDs, and the Bay Area, Lake, North Coast Unified, Northern Sierra, and Sacramento Metropolitan AQMDs will be adopting district Air Toxics Hot Spots Program fee rules for fiscal year 1994-95;

4. The revenues to be assessed pursuant to the proposed fee regulation are reasonably necessary to recover the anticipated program costs which will be incurred by the Board, the districts, and the Office to implement and administer the Act's provisions in fiscal year 1994-95;

5. The program costs in the State budget include a permanent reduction of $183,000 in accordance with the five year plan presented in 1993, and the Air Resources Board and the Office of Environmental Health Hazard Assessment were able to carry-over an additional one-time savings of $750,000 from prior years;

6. On the basis of a financial analysis conducted to indicate the economic impacts on affected facilities resulting from the fees proposed in this regulation, the staff has determined that the proposed amendments impose no noticeable impact on the profitability of California businesses and will not cause a significant change in employment, business creation, elimination, or expansion; and business competitiveness. However, for some businesses operating with little or no margin of profitability, the proposed amendments may have a significant adverse economic impact on businesses, or on private persons directly affected by the regulation; including their ability to compete with similar businesses in other states, the creation, elimination, or expansion of jobs and businesses within the State;

7. This regulatory action will not have a significant adverse impact on the environment and may indirectly benefit air quality by stimulating a reduction in emissions of both toxic and criteria pollutants.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves sections 90700-90705, Title 17, California Code of Regulations including the appendix referenced therein, as set forth in Attachment A hereto.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to adopt sections 90700-90705, Title 17, California Code of Regulations after making them available to the public for a period of 15 days, provided that the Executive Officer shall consider such written comments as may be submitted during this period, shall make modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if he determines that this is warranted.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to revise the facility program categories as necessary to reflect needed revisions brought to the Board's attention through July 28, 1994, only, and to accept no further revisions after that date.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to provide a 15-day period in which the public may review and comment on the modifications which the Board has approved to the original proposal.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to continue to implement the five year plan to reduce State costs.

I hereby certify that the above is a true and correct copy of Resolution 94-51, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

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APR 24 1995

RESOURCES AGENCY OF CALIFORNIA

STATE OF CALIFORNIA
AIR RESOURCES BOARD
2020 L STREET
P.O. BOX 2815
SACRAMENTO, CA 95812

PETE WILSON, Governor

Notice of Decision and Response to Significant Environmental Issues

Item: NOTICE OF PUBLIC HEARING TO CONSIDER AMENDMENTS TO THE SMALL REFINER PROVISIONS IN THE REGULATION LIMITING THE AROMATIC HYDROCARBON CONTENT OF CALIFORNIA MOTOR VEHICLE DIESEL FUEL -- SMALL REFINER VOLUME LIMITS

Adopted by: Executive Order G-94-049
Signed: June 9, 1995

Approved by: Resolution 94-52

Agenda Item No.: 94-8-1

Public Hearing Date: July 29, 1994

Issuing Authority: Air Resources Board

Comment: The Air Resources Board staff report, which is incorporated by reference herein, identified significant adverse environmental impacts that could result from the proposed amendments. The increased volume of 20 percent aromatic hydrocarbon content diesel fuel that small refiners would be permitted to produce and supply under the proposal would reduce the oxides of nitrogen (NOx) and particulate matter (PM10) emissions benefits which would otherwise occur as a result of compliance with Title 13, California Code of Regulations, section 2282 in 1995 and thereafter. The staff report described the staff's efforts to identify any feasible mitigation and alternatives, and staff's conclusion that it could not identify any alternative that would reduce the adverse environmental impacts while still achieving the compelling objectives of the proposed amendments.

Comments were received identifying significant environmental issues pertaining to this item. These comments are summarized and responded to in the Final Statement of Reasons, which is incorporated by reference herein.

In Resolution 94-52, which is incorporated herein by reference, the Board determined that the amendments pertaining to the small refiner exempt volume limits could result in a reduction in emission benefits of up to 3 tons per day NOx and up to 0.6 tons per day in PM10 during 1995 and thereafter. However, these temporary reductions in the benefits of the regulation represent the maximum <u>potential</u> adverse environmental impacts. They will be fully realized only if the small refiners produce and market

20 percent aromatic hydrocarbon content of diesel fuel in their full exempt volumes. Since the estimated costs for small refiners to produce diesel fuel meeting the 20 percent or equivalent aromatic hydrocarbon content limit are greater than the estimated costs for large refiners to meet the 10 percent or equivalent standard, whether the small refiners produce their full exempt volumes will depend on market demand.

In Resolution 94-52, the Board found that the ARB had investigated whether there are any feasible mitigation measures or alternatives that would lessen or eliminate the significant adverse emission impacts of the amendments, and has not identified any such mitigation measures or alternatives which would also allow the remaining small refiners to produce diesel fuel in an economically viable manner. No feasible mitigation measures or alternatives have been identified which would reduce or eliminate the adverse environmental impacts of the amendments pertaining to exempt volumes while still allowing the remaining small refiners to produce diesel fuel in an economically viable manner.

Response: See above.

Certified:

Artavia M. Edwards
Regulations Coordinator

Date: June 9, 1995

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JUN 1 3 1995

RESOURCES AGENCY OF CALIFORNIA

STATE OF CALIFORNIA PETE WILSON, Governor

AIR RESOURCES BOARD
2020 L STREET
P.O. BOX 2815
SACRAMENTO, CA 95812

Notice of Decision and Response to Significant Environmental Issues

Item: Notice of Public Hearing to Consider Amendments to the Small Refiner Provisions in the Regulation Limiting the Aromatic Hydrocarbon Content of California Motor Vehicle Diesel Fuel -- Small Refiner Volume Limits for the Fourth Quarter of 1994

Adopted by: Executive Order G-94-048
Signed: August 24, 1994

Approved by: Resolution 94-52

Agenda Item No.: 94-8-1

Public Hearing Date: July 29, 1994

Issuing Authority: Air Resources Board

Comment: The Air Resources Board staff report, which is incorporated by reference herein, identified significant adverse environmental impacts that could result from the proposed amendments. The increased volume of 20 percent aromatic hydrocarbon content diesel fuel that small refiners would be permitted to produce and supply under the proposal would reduce the oxides of nitrogen (NOx) and particulate matter (PM10) emissions benefits which would otherwise occur as a result of compliance with Title 13, California Code of Regulations, section 2282 in October 1994 and thereafter. The staff report described the staff's efforts to identify any feasible mitigation and alternatives, and staff's conclusion that it could not identify any alternative that would reduce the adverse environmental impacts while still achieving the compelling objectives of the proposed amendments.

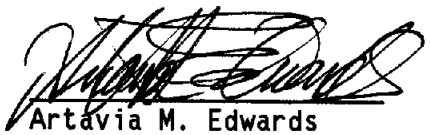
Comments were received identifying significant environmental issues pertaining to this item. These comments are summarized and responded to in the Final Statement of Reasons, which is incorporated by reference herein.

In Resolution 94-52, which is incorporated herein by reference, the Board determined that the amendments pertaining to the fourth quarter of 1994 could result in a reduction in emission benefits of up to 5.9 tons per day NOx and up to 1.3 tons per day in PM10 during the fourth quarter of 1994. However, these temporary reductions in the benefits of the regulation represent the maximum potential adverse environmental impacts. They will be fully realized only if the small refiners produce and market

20 percent aromatic hydrocarbon content diesel fuel in their full "suspension" volumes in the fourth quarter of 1994. Since the estimated costs for small refiners to produce diesel fuel meeting the 20 percent or equivalent aromatic hydrocarbon content limit are greater than the estimated costs for large refiners to meet the 10 percent or equivalent standard, whether the small refiners produce their full suspension volumes in the fourth quarter will depend on market demand.

In Resolution 94-52, the Board found that the ARB had investigated whether there are any feasible mitigation measures or alternatives that would lessen or eliminate the significant adverse emission impacts of the amendments, and has not identified any such mitigation measures or alternatives which would also allow the remaining small refiners to produce diesel fuel in an economically viable manner. No feasible mitigation measures or alternatives have been identified which would reduce or eliminate the adverse environmental impacts of the amendments pertaining to the fourth quarter of 1994 while still providing a sufficient assurance against a diesel fuel supply shortage or disruption in the high-demand fall harvest season.

Response: See above.

Certified: 

Artavia M. Edwards
Regulations Coordinator

Date: 14 Sep 94

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SEP 15 1994
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State of California
AIR RESOURCES BOARD

Executive Order G-94-049

WHEREAS, on July 29, 1994, the Air Resources Board (ARB) conducted a public hearing to consider proposed amendments to the small refiner volume provisions in the regulation limiting the aromatic hydrocarbon content of California motor vehicle diesel fuel;

WHEREAS, following the public hearing on July 29, 1994, the Board adopted Resolution 94-52, in which the Board approved the amendments to section 2282, Title 13, California Code of Regulations, as set forth in Attachment A thereto, with the modifications set forth in Attachment B thereto;

WHEREAS, Resolution 94-52 directed the Executive Officer to adopt the amendments as set forth in Attachment A thereto with the modifications set forth in Attachment B thereto, with such conforming modifications as may be appropriate, after making the modified text available to the public for a supplemental written comment period of 15 days, provided that the Executive Officer shall consider such written comments regarding the modifications as may be submitted during this period, shall make modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if he determines that this is warranted;

WHEREAS, the text of section 2282, Title 13, California Code of Regulations, was made available, in accordance with section 44, Title 1, California Code of Regulations, for a 15-day period during which comments on the modifications to the original proposed text were solicited; the text of the regulation clearly indicated the modifications to the original proposal;

WHEREAS, 10 written comments were received during the 15-day comment period; the Executive Officer has considered the comments pertaining to the modifications to the original proposal and has determined that no further modifications are necessary or appropriate;

WHEREAS, the amendments to section 2282(e)(1) approved by the Board included changes pertaining to the fourth quarter 1994 volume limits for small refiners subject to a suspension from the aromatic hydrocarbon content requirements until October 1, 1994; Resolution 94-52 directed the Executive Officer to take whatever expedited action was necessary to assure that these amendments became effective prior to October 1, 1994;

WHEREAS, since the amendments approved by the Board in Resolution 94-52 pertaining to the fourth quarter 1994 volume limits reflected no modifications to the originally proposed text, no supplemental comment period for this element of the amendments was necessary and no supplemental comment was solicited;

WHEREAS, in accordance with the Board's direction in Resolution 94-52, the Board-approved amendments to section 2282(e)(1) pertaining to the fourth quarter 1994 volume limitations, with three nonsubstantive modifications, were adopted in Executive Order G-94-048, and are now in effect; and

WHEREAS, Attachment A hereto contains the text of section 2282 as it is now in effect, clearly indicating the amendments that were made available in connection with the 15-day comment period and have not yet become effective.

NOW, THEREFORE, IT IS ORDERED that the recitals and findings contained in Resolution 94-52 are incorporated herein.

IT IS FURTHER ORDERED, in accordance with Resolution 94-52 and Health and Safety Code sections 39515 and 39516, that the amendments to sections 2282, Title 13, California Code of Regulations, are hereby adopted as set forth in Attachment A hereto.

Executed this 9th day of June, 1995, at Sacramento, California.

James D. Boyd
Executive Officer

Attachment

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RESOURCES AGENCY OF CALIFORNIA

State of California
AIR RESOURCES BOARD

Resolution 94-52

July 29, 1994

Agenda Item No.: 94-7-3

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (the Board or ARB) 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, Health and Safety Code section 43013 authorizes the Board to adopt and implement motor vehicle fuel specifications for the control of air contaminants which the Board has found to be necessary, cost-effective, and technologically feasible to carry out the purposes of Division 26 of the Health and Safety Code;

WHEREAS, sections 43018(a) and (b) of the Health and Safety Code direct the Board to endeavor to achieve the maximum degree of emission reduction possible from vehicular and other mobile sources in order to accomplish the attainment of the state ambient air quality standards at the earliest practicable date, and direct the Board no later than January 1, 1992 to take whatever actions are necessary, cost-effective, and technologically feasible in order to achieve, by December 31, 2000, specified reductions in the emissions of air pollutants from vehicular sources, including emissions of oxides of nitrogen (NOx) and particulate matter (PM);

WHEREAS, section 43018(c) of the Health and Safety Code provides that in carrying out section 43018, the Board shall adopt standards and regulations which will result in the most cost-effective combination of control measures on all classes of motor vehicles and motor vehicle fuel, including but not limited to specification of vehicular fuel composition;

WHEREAS, sections 43013 and 43018 of the Health and Safety Code further provide that in adopting standards and regulations pertaining to motor vehicle fuels, the Board shall consider the effect of the standards and regulations on the economy of the state;

WHEREAS, following a public hearing on November 17, 1988, the Board approved and subsequently adopted statewide regulatory limits on the sulfur and aromatic hydrocarbon content of California motor vehicle diesel fuel, which are now contained in Title 13, California Code of Regulations, sections 2281 and 2282 respectively;

WHEREAS, section 2282 establishes a basic 10 percent limit on the aromatic hydrocarbon content of California motor vehicle diesel fuel sold or supplied

on or after October 1, 1993; refiners are permitted to sell diesel fuel formulations having aromatic hydrocarbon contents greater than 10 percent if the formulation has been certified through engine testing to result in emissions equivalent to the emissions resulting from diesel fuel having a 10 percent aromatic hydrocarbon content;

WHEREAS, section 2282 establishes a less stringent aromatic hydrocarbon standard of 20 percent (or equivalent) for California motor vehicle diesel fuel produced by small refiners, but limits the quantity of diesel fuel that a small refiner is permitted to produce each year subject to the 20 percent standard instead of the 10 percent standard; this quantity is referred to as the small refiner's "exempt volume" and is calculated as 65 percent of the average of the three highest annual production volumes of "distillate fuel" (No. 1, No. 2, No. 4 diesel fuel and No. 1 and No. 2 fuel oil) that each refinery produced during the base years 1983-1987, as reported to the California Energy Commission, except that for refineries that were not operating for two or more years during 1983-1987, exempt volume may be calculated as 65 percent of the average annual production volumes of distillate reported for 1989 and 1990;

WHEREAS, section 2282(a)(4) provides that the aromatic hydrocarbon content limits will not apply during the effective period of any suspension of the limits on the sulfur content of diesel fuel; three small refiners--Kern Oil and Refining (Kern), Paramount Petroleum (Paramount) and Powerine Oil Company (Powerine)--have received suspensions of the sulfur content limits effective through September 30, 1994, and accordingly diesel fuel produced by these refiners and supplied from their refineries prior to October 1, 1994 is not subject to the ARB's aromatic hydrocarbon standards;

WHEREAS, the staff has initially proposed amendments to section 2282 which would allow a small refiner the option each year of producing California motor vehicle diesel fuel subject to the 20 percent aromatic hydrocarbon content limit in volumes up to 100 percent of its "distillate fuel" production during the base years, providing that under the option the small refiner's total sales in the year of "distillate fuel" (including diesel fuel) for the California market could not exceed 100 percent of its "distillate fuel" production during the base years;

WHEREAS, the staff's originally proposed amendments would also delay the effective date of the small refiner exempt volume limits now in the regulation from October 1, 1994 to January 1, 1995, for small refiners not subject to the aromatic hydrocarbon limits until October 1, 1994 due to suspensions of the diesel fuel sulfur content limits; staff proposes that the diesel fuel produced by such a small refiner and supplied from its refinery during the fourth quarter of 1994, which will be subject to the less stringent 20 percent aromatic content standard, be limited to the quarterly volume limits imposed by the Executive Officer in connection with issuance of the suspension orders;

WHEREAS, at the public hearing to consider this matter the ARB staff has proposed modifications to the originally-proposed amendments, set forth in Attachment B hereto;

WHEREAS, the California Environmental Quality Act and Board regulations require that an action not be adopted as proposed where it will have significant adverse environmental impacts if feasible alternatives or mitigation measures are available which would substantially reduce or avoid such impacts;

WHEREAS, the Board has considered the impact of the proposed amendments on the economy of the state;

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

WHEREAS, the Board finds that:

The presence of small refiners in the California motor vehicle fuels market has an important procompetitive impact, and small refiners are often critical suppliers for the independent, unbranded marketers who distribute a considerable percentage of California motor vehicle diesel fuel;

Since the Board acted in 1988 to approve the small refiner provisions of section 2282, most of the then-existing California small refiners have either ceased operations altogether or have ceased producing motor vehicle diesel fuel;

The cost to the remaining small refiners of producing 10 percent or equivalent aromatic hydrocarbon content diesel fuel would be far greater on a per-gallon basis than the cost to large refiners, and these small refiners would suffer substantial economic penalties if they were forced to sell their noncomplying diesel fuel to out-of-state markets;

The three remaining small refiners other than Witco would not be able to operate economically after October 1, 1994 under the small refiner provisions now in place which set the exempt volumes at 65 percent of distillate fuel volumes produced during the base years, in part because California motor vehicle diesel fuel has represented considerably more than 65 percent of the small refiners' distillate fuel sales and because Paramount's and Powerine's below-average refinery utilization levels in the base years were well below the industry average due to financial difficulties;

Furthermore, California average refinery utilization rates have increased substantially since the beginning of the base years, from an average of about 70 percent in 1983-1984 to an average of about 90 percent in 1991-1992, and are significantly higher than 90 percent at the present time; this increase is attributable in large part to the need of refiners to spread increased operating costs across a maximized production volume, and operation at substantially lower utilization rates under current conditions may not be economically viable;

Accordingly, it is necessary and appropriate to allow each small refiner to base its exempt volume on the crude throughput level of its refinery when operated at the 90 percent average industry-wide refinery utilization rate for 1991-1992 in California; in order to identify specific and reasonable diesel fuel production levels when the refinery is operated at such a utilization rate, it is appropriate to multiply the crude throughput by the average of the refinery's two highest annual ratios of distillate produced to crude oil distilled in 1988-1992, and to further adjust that volume to reflect the average percentage of the refiner's distillate fuel production that was sold as California motor vehicle diesel fuel;

Under the amendments approved herein, the costs of small refiners to produce diesel fuel meeting the 20 percent or equivalent aromatic hydrocarbon limit will still on average be greater on a per-gallon basis than the costs to large refiners of producing diesel fuel meeting the 10 percent or equivalent aromatic hydrocarbon content limit;

The amendments approved herein pertaining to the volume limitations on the 20 percent aromatic hydrocarbon content diesel fuel produced by small refiners and supplied in the fourth quarter of 1994 are necessary and appropriate to assure a more orderly transition to the lower volume limits during the January-February low demand period rather than during October when the fall harvesting season results in a period of relatively high demand;

WHEREAS, the Board further finds that:

The amendments approved herein will result in a significant adverse environmental impact in that the amendments will increase the amount of 20 percent aromatic hydrocarbon content diesel fuel that may lawfully be supplied by small refiners by approximately 24,700 barrels per day during the fourth quarter of 1994 and by approximately 12,800 barrels per day starting January 1, 1995 compared to the lower

volume limits that would be imposed under the existing regulation starting October 1, 1994; this could reduce the emission benefits that would otherwise occur under the existing regulation in the fourth quarter of 1994 by up to about 5.9 tons per day of NOx and 1.3 tons per day in PM10, and could reduce the emission benefits that would otherwise occur under the existing regulation starting January 1, 1994 by up to about 3 tons per day of NOx and 0.6 tons per day of PM10;

The ARB has investigated whether there are any feasible mitigation measures or alternatives that would lessen or eliminate the significant adverse emission impacts of the amendments approved herein, and has not identified any such mitigation measures or alternatives which would also allow the remaining small refiners to produce diesel fuel in an economically viable manner;

The need to avoid the severe economic hardship to the remaining small refiners that would likely occur in the absence of the action taken herein, and the need to help assure that small refiners remain a procompetitive force in the motor vehicle fuels markets, is an overriding consideration that outweighs the significant adverse environmental impacts that will result from this action;

Although the amendments approved herein will clearly result in reduced emission benefits in October 1994 and thereafter compared to the emission benefits that would occur without the amendments, it is noteworthy that the total emission benefits from the aromatic hydrocarbon content limits in section 2282 as amended in this rulemaking will be at least as great as the emission benefits that would have been expected when the original regulation was adopted in 1988.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves the amendments to section 2282, Title 13, California Code of Regulations, as set forth in Attachment A hereto, with the modifications described in Attachment B hereto.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to incorporate into the approved regulatory amendments the modifications described in Attachment B hereto with such other conforming modifications as may be appropriate, and either to adopt the modified amendments after making them available to the public for a supplemental written comment period of 15 days, with such additional modifications as may be appropriate in light of supplemental comments received, or to present the amendments to the Board for further consideration if he determines that this is warranted in light of supplemental written comments received.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to take whatever expedited action is necessary to assure that the amendments approved herein pertaining to the volume limits for 20 percent aromatic hydrocarbon content diesel fuel supplied in the fourth quarter of 1994 by small refiners previously subject to suspensions of the sulfur content limits become effective prior to October 1, 1994.

I hereby certify that the above is a true and correct copy of Resolution 94-52 as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

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Proposed Amendments to the Small Refiner Volume Provisions in the Regulation Limiting the Aromatic Hydrocarbon Content of California Motor Vehicle Diesel Fuel

STAFF'S SUGGESTED MODIFICATIONS TO THE ORIGINAL PROPOSAL

July 29, 1994

1. **Modifications to provisions identifying an optional mechanism for determining the volume of a small refiner's diesel fuel production that is subject to the less stringent 20 percent limit on aromatic hydrocarbon content**

Delete the originally proposed provisions identifying the option under which a small refiner could elect to produce more than its "exempt volume" as California motor vehicle diesel fuel subject to the 20 percent aromatic hydrocarbon content standard. This includes deleting the originally proposed new provisions in section 2282(e)(1)(B) through 2282(e)(1)(C); deleting the proposed amendments in section 2282(e)(3); deleting the proposed new definitions in section 2282(b)(1), (b)(5), and (b)(6), and making other necessary conforming modifications.

Add new language that allows small refiners to elect each year to use an optional calculation of exempt volume, set forth in a revised definition of exempt volume (section 2282(b)(4) in the existing regulation). This optional calculation is made in accordance with the following steps.

First, the barrel per calendar day "operable crude oil capacity" of the small refiner's refinery for 1991 and 1992 is identified, based on data which are reported to the ARB from the California Energy Commission (CEC) and are derived from "Monthly Refining Reports" (EIA 810) submitted to the CEC no later than June 30, 1994. If the CEC is unable to derive such data from the "Monthly Refining Reports" for a particular small refiner, the Executive Officer shall determine the small refiner's operable crude oil capacity for 1991 and 1992 based on other publicly available and generally recognized sources.

Second, this crude oil capacity is multiplied by 0.9011, representing the overall refinery utilization rate (crude oil run divided by operable crude oil capacity) in the California refining industry for 1991 and 1992, as derived from reports of crude oil run and operable capacity in the "Quarterly Oil Reports" issued by the CEC.

Third, the resulting crude throughput volume is multiplied by the average of the refinery's two highest annual ratios of distillate produced to crude oil distilled in the period 1988 through 1992, based on distillate production data recorded by the CEC from MO-7 reporting forms submitted to the CEC no later than June 30, 1994 and from crude

oil run data derived by the CEC from "Monthly Refining Reports" submitted to the CEC no later than June 30, 1994.

Fourth, the resulting volume is multiplied by the average of the small refiners' two highest annual fractions of distillate production that have been sold as California motor vehicle diesel fuel during the period 1988 through 1992. These fractions shall be determined by the Executive Officer from sales data certified by authorized representatives of the small refiners and such other information from the small refiners deemed necessary by the Executive Officer.

2. **Identifying batches of diesel fuel as nonexempt**

The small refiner provisions in the diesel aromatics regulation currently provide that all of the California motor vehicle diesel fuel that is shipped from a small refinery starting January 1 of each year is counted against the small refiner's "exempt volume." To provide additional flexibility, the staff recommends that the Board add the following sentence after the first sentence in section 2282(e)(1). The language is derived from a similar sentence in the small refiner provisions of the regulation limiting the sulfur content of motor vehicle diesel fuel sold in the South Coast Air Basin before October 1, 1993 (section 2280(h)(1)):

> Diesel fuel which is designated by the small refiner as not exempt under this section (e), and which is reported to the executive officer or his/her designee pursuant to a protocol entered into between the small refiner and the executive officer or his/her designee, shall not be counted against the exempt volume and shall not be exempt under this section (e).

3. **Determination of exempt volume for independent refiners temporarily subject to the small refiner provisions**

Add language to section 2282(j) providing that, for any independent refiner qualifying for interim treatment as a small refiner, exempt volume shall be determined in accordance with the method set forth in section 2282(b)(4) prior to the addition of the optional methodology for calculating exempt volume adopted in this rulemaking.

Notice of Decision and
Response to Significant Environmental Issues

Item: PUBLIC HEARING TO CONSIDER NEW SPECIFICATIONS FOR DIESEL ENGINE CERTIFICATION FUEL, PROPOSED AMENDMENTS TO THE OXYGEN SPECIFICATION FOR NATURAL GAS CERTIFICATION FUEL, AND PROPOSED AMENDMENTS TO THE COMMERCIAL MOTOR VEHICLE LIQUEFIED PETROLEUM GAS FUEL REGULATIONS

Approved by: Resolution 94-53

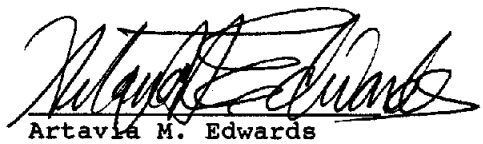
Agenda Item No.: 94-9-1

Public Hearing Date: September 22, 1994

Issuing Authority: Air Resources Board

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

Response: N/A

Certified: 

Artavia M. Edwards
Regulations Coordinator

Date: 28 Feb 95

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RESOURCES AGENCY OF CALIFORNIA

State of California
AIR RESOURCES BOARD

Resolution 94-53

September 22, 1994

Agenda Item No.: 94-9-1

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

WHEREAS, in section 43000 of the Health and Safety Code the Legislature has declared that the emission of air contaminants from motor vehicles is the primary cause of air pollution in many parts of the state, and that the control and elimination of those air contaminants is of prime importance for the protection and preservation of the public health and well-being, and for the prevention of irritation to the senses, interference with visibility, and damage to vegetation and property;

WHEREAS, section 43018(a) of the Health and Safety Code, enacted by the California Clean Air Act of 1988, directs the Board to endeavor to achieve the maximum degree of emission reduction possible from vehicular and other mobile sources in order to accomplish the attainment of the state ambient air quality standards at the earliest practicable date;

WHEREAS, section 43018(b) of the Health and Safety Code directs the Board no later than January 1, 1992 to take whatever actions are necessary, cost-effective, and technologically feasible in order to achieve, by December 31, 2000, a reduction in motor vehicle emissions of reactive organic gases (ROG) of at least 55 percent and a reduction of motor vehicle emissions of oxides of nitrogen (NOx), and the maximum feasible reductions in particulates (PM), carbon monoxide (CO), and toxic air contaminants from vehicular sources;

WHEREAS, section 43018(c) of the Health and Safety Code provides that in carrying out section 43018, the Board shall adopt standards and regulations which will result in the most cost-effective combination of control measures on all classes of motor vehicles and motor vehicle fuel, including but not limited to reductions in motor vehicle exhaust and evaporative emissions, reductions in in-use vehicular emissions through durability and performance improvements, requiring the purchase of low-emission vehicles by state fleet operators, and specification of vehicular fuel composition;

WHEREAS, section 43104 of the Health and Safety Code directs the Board to adopt test procedures for determining whether new motor vehicles are in compliance with the emission standards established by the Board;

WHEREAS, the Board's test procedures for certifying 1985 and subsequent model heavy-duty diesel engines and vehicles are contained in the California Exhaust Emission Standards and Test Procedures for 1985 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles (the Heavy-Duty Diesel Test Procedures), which is incorporated by reference in Title 13, California Code of Regulations, section 1956.8(b);

WHEREAS, the Board's test procedures for certifying 1987 and subsequent model heavy-duty Otto-cycle engines and vehicles are contained in the California Exhaust Emission Standards and Test Procedures for 1987 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles (the Heavy-Duty Otto-Cycle Test Procedures), which is incorporated by reference in Title 13, California Code of Regulations, section 1956.8(d);

WHEREAS, the Board's test procedures for certifying 1988 and subsequent model light- and medium-duty vehicles are contained in the California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles (the Light- and Medium-Duty Vehicle Test Procedures), which is incorporated by reference in Title 13, California Code of Regulations, section 1960.1(k);

WHEREAS, Title 13, California Code of Regulations, section 2282(g)(3) identifies the specifications of the 10 percent aromatic hydrocarbon content "reference fuel" to be used in engine testing to determine whether an alternative diesel fuel formulation results in emissions equivalent to the emissions associated with diesel fuel meeting the 10 percent aromatic hydrocarbon content standard applicable to diesel fuel sold commercially for use in motor vehicles in California;

WHEREAS, the Heavy-Duty Diesel Test Procedures and the Light- and Medium-Duty Vehicle Test Procedures provide that certification testing of (a) 1995 and subsequent model-year passenger cars, light-duty trucks and medium-duty diesel-fueled vehicles, (b) 1995 and subsequent model-year medium-duty engines, and (c) 1996 and 1997 model-year urban bus diesel engines, may as an option be conducted using diesel fuel meeting the 10 percent aromatic hydrocarbon content "reference fuel" specifications set forth in section 2282(g)(3);

WHEREAS, The California Exhaust Emission Standards and Test Procedures for 1995 and Later Utility and Lawn and Garden Equipment Engines, incorporated by reference in Title 13, California Code of Regulations, section 2403, provides that the certification test fuel used for emission testing of 1995 and later utility and lawn and garden equipment engines shall be consistent with the fuel specifications as outlined in the latest amended text of the Light- and Medium-Duty Vehicle Test Procedures;

WHEREAS, the Heavy-Duty Diesel Test Procedures, the Heavy-Duty Otto-Cycle Test Procedures, and the Light- and Medium-Duty Vehicle Test Procedures provide that the specifications for natural gas certification fuel for 1994

and subsequent model vehicles and engines include an oxygen content requirement of 0.5 +/- 0.1 mole percent;

WHEREAS, Title 13, California Code of Regulations, section 2292.6 provides that liquefied petroleum gas (LPG) intended for use in motor vehicles in California must have a propylene (propene) content not exceeding 10 volume percent for LPG sold or supplied between January 1, 1992 and December 31, 1994, and not exceeding 5 volume percent for LPG sold or supplied on or after January 1, 1995;

WHEREAS, the staff has proposed regulatory amendments which, as initially proposed, would establish more narrowly-defined specifications, including an aromatic hydrocarbon content of 8 to 12 percent and a natural cetane number of 47 to 55, for the diesel fuel which may as an option be used in certification testing of (a) 1995 and subsequent model-year passenger cars, light-duty trucks and medium-duty diesel-fueled vehicles, (b) 1995 and subsequent model-year medium-duty engines, (c) 1996 and 1997 model-year urban bus diesel engines, and (d) 1995 and later utility and lawn and garden equipment;

WHEREAS, the proposed regulatory amendments, as initially proposed, would also revise the oxygen content specification for the natural gas certification fuel for 1994 and subsequent model vehicles and engines to specify a maximum content of 0.5 mole percent;

WHEREAS, the proposed regulatory amendments, as initially proposed, would also revise the required specifications for LPG intended for use in motor vehicles in California to extend the maximum propene limit of 10 volume percent through December 31, 1996, and to delay imposition of the maximum propene limit of 5 volume percent until January 1, 1997;

WHEREAS, the California Environmental Quality Act and Board regulations require that an action not be adopted as proposed where it will have significant adverse environmental impacts if feasible alternatives or mitigation measures are available which would substantially reduce or avoid such impacts;

WHEREAS, the Board has considered the impact of the proposed amendments on the economy of the state;

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

WHEREAS, the Board finds that:

The amendments adopted herein pertaining to the specifications for the diesel fuel that may as an option be used for certification testing of (a) 1995 and subsequent model-year passenger cars, light-duty trucks and medium-duty diesel-fueled vehicles, (b) 1995 and subsequent model-year medium-duty engines, (c) 1996 and 1997 model-year urban bus diesel engines, and (d) 1995 and later utility and lawn and garden equipment, are necessary and appropriate to reflect the expected parameters of commercial 10 percent aromatic hydrocarbon content motor vehicle diesel fuel in ranges sufficiently narrow to assure repeatable and reliable certification testing;

It is necessary and appropriate to revise the oxygen content specification for the natural gas certification fuel for 1994 and subsequent model vehicles and engines to specify a maximum content of 0.5 mole percent, in order to reduce the potential safety risks in producing natural gas meeting the oxygen content specification;

It is necessary and appropriate to delay, until January 1, 1997, the imposition of the maximum propene limit of 5 volume percent for LPG sold commercially for use in motor vehicles in California, in order to reduce the possibility of supply shortages and market segregation which could adversely impact the development of the market for commercial motor vehicle LPG fuel; and

The California test procedures for certification of new passenger cars, light-duty trucks, medium-duty vehicles and engines, and heavy-duty engines as amended herein differ from comparable regulations in the Code of Federal Regulations, and the differing state regulations are authorized by sections 43013, 43018, 43101 and 43104 of the Health and Safety Code;

The amendments adopted herein will not have a significant adverse emission or other environmental impact; and

The amendments adopted herein will not have an adverse impact on the economy of the state.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby adopts the amendments to sections 1956.8(b), 1956.8(d), and 1960.1(k), Title 13, California Code of Regulations, as set forth in Attachment A hereto, the amendments to the California Exhaust Emission Standards and Test Procedures for 1985 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles as set forth in Attachment B hereto, the amendments to the California Exhaust Emission

Standards and Test Procedures for 1987 and Subsequent Model Heavy-Duty Otto-cycle Engines and Vehicles as set forth in Attachment C hereto, and the amendments to the California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles as set forth in Attachment D hereto.

BE IT FURTHER RESOLVED that the Board hereby determines that the amendments adopted herein to the California motor vehicle emission standards and test procedures will not cause the California motor vehicle emission standards, in the aggregate, to be less protective of public health and welfare than applicable federal standards.

BE IT FURTHER RESOLVED that the Board hereby finds that separate California emission standards and test procedures are necessary to meet compelling and extraordinary conditions.

BE IT FURTHER RESOLVED that the Board finds that the California motor vehicle emission standards and test procedures as amended herein will not cause the California requirements to be inconsistent with section 202(a) of the Clean Air Act and raise no new issues affecting previous waiver determinations of the Administrator of the Environmental Protection Agency pursuant to section 209(b) of the Clean Air Act.

BE IT FURTHER RESOLVED that the Executive Officer shall forward the amendments pertaining to the motor vehicle emission standards and test procedures to the U.S. Environmental Protection Agency with a request for a waiver or confirmation that the amendments are within the scope of an existing waiver of federal preemption pursuant to section 209(b) of the Clean Air Act, as appropriate.

I hereby certify that the above is a true and correct copy of Resolution 94-53 as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

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Office of the Secretary
MAR 02 1995
RESOURCES AGENCY OF CALIFORNIA

Resolution 94-53

September 22, 1994

Identification of Attachments to the Resolution

Attachment A: Proposed amendments to Title 13, California Code of Regulations, sections 1956.8(b), 1956.8(d), 1960.1(k), and 2292.6 as set forth in Appendix A to the Staff Report.

Attachment B: Amendments to the California Exhaust Emission Standards and Test Procedures for 1985 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles, as set forth in Appendix B to the Staff Report.

Attachment C: Amendments to the California Exhaust Emission Standards and Test Procedures for 1987 and Subsequent Model Heavy-duty Otto-cycle Engines and Vehicles, as set forth in Appendix C to the Staff Report.

Attachment D: Amendments to the California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles, as set forth in Appendix D to the Staff Report.

STATE OF CALIFORNIA
AIR RESOURCES BOARD
2020 L STREET
P.O. BOX 2815
SACRAMENTO, CA 95812

PETE WILSON, Governor

Notice of Decision and Response to Significant Environmental Issues

Item: PUBLIC HEARING TO CONSIDER THE ADOPTION OF THE ALTERNATIVE CONTROL PLAN (ACP) FOR CONSUMER PRODUCTS

Adopted by: Executive Order G-94-059
Signed: May 18, 1995

Approved by: Resolution 94-54

Agenda Item No.: 94-9-2

Public Hearing Date: September 22, 1994

Issuing Authority: Air Resources Board

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

Response: N/A

Certified: Artavia M. Edwards
Regulations Coordinator

Date: 18 May 1995

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JUN 2 8 1995

RESOURCES AGENCY OF CALIFORNIA

State of California
AIR RESOURCES BOARD

Resolution 94-54

September 22, 1994

Agenda Item No.: 94-9-2

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

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

WHEREAS, following an October 11, 1990, public hearing, the Board approved a regulation to reduce volatile organic compound (VOC) emissions from consumer products in California [the "consumer products regulation"] (Title 17, California Code of Regulations, sections 94507-94517);

WHEREAS, following a January 9, 1992, public hearing, the Board approved amendments to the consumer products regulation to reduce VOC emissions from 10 additional consumer product categories ("the Phase II amendments");

WHEREAS, the consumer product regulation reduces VOC emissions primarily through a "command-and-control" approach, in which maximum allowable VOC content limits are specified for individual product categories;

WHEREAS, to improve the efficiency of the ARB consumer products program and provide additional flexibility to manufacturers and marketers, the staff has proposed the Alternative Control Plan regulation for consumer products ("the ACP regulation"; Title 17, California Code of Regulations, sections 94540-54555);

WHEREAS, the ACP regulation is designed to achieve VOC emission reductions that are equivalent to the emission reductions achieved by the existing consumer products regulation at lower overall cost;

WHEREAS, the ACP regulation is a voluntary, market-based regulation which employs the concept of placing an aggregate emissions cap, or "bubble", over a group of products selected by participating manufacturers and marketers instead of specifying VOC content limits for individual product categories;

WHEREAS, manufacturers who voluntarily choose to enter the ACP program will select the products and formulate a detailed bubble program for these products which will be approved by the Executive Officer if the program meets the criteria specified in the ACP regulation;

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

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

WHEREAS, Board staff has consulted with the United States Environmental Protection Agency (U.S. EPA) regarding consumer product regulations promulgated by other state and local governments, as provided in section 183(e)(9) of the federal Clean Air Act;

WHEREAS, the Board finds that:

Consumer products have not been as extensively controlled as other significant emission sources, and control of emissions from consumer products is necessary in order to attain and maintain national and state ambient air quality standards;

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

VOC emissions from consumer products contribute to ambient concentrations of ozone and PM_{10} in the state;

The existing consumer products regulation will result in significant reductions in VOC emissions from consumer products, and corresponding reductions in ambient ozone and PM_{10} levels;

It is appropriate to approve the ACP regulation in order to provide additional flexibility and lower compliance costs for manufacturers and marketers subject to the consumer products regulation;

The ACP regulation will have beneficial overall economic impacts as compared to the existing consumer products regulation, as described in the detailed assessment of economic impacts contained in the staff report;

There exists adequate data to support the adoption of the ACP regulation;

The ACP regulation is necessary to attain and maintain the state and national ambient air quality standards with maximum flexibility and less cost;

The ACP regulation is technologically and commercially feasible;

The reporting requirements of the ACP regulation which apply to businesses that voluntarily participate in the ACP program are necessary for the health, safety, and welfare of the people of the state;

The ACP regulation is authorized by California law;

The ACP regulation is consistent with the U.S. EPA's Economic Incentives Program rules (59 FR 16690; April 7, 1994);

WHEREAS, the Board further finds that:

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

NOW, THEREFORE, BE IT RESOLVED that the Board hereby adopts new Article 4, sections 94540 to 94555, Title 17, California Code of Regulations, as set forth in Attachment A hereto.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to adopt the ACP regulation set forth in Attachment A after making it available to the public for a period of 15 days, provided that the Executive Officer shall consider such written comments as may be submitted during this period, shall make modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if he determines that this is warranted.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to: (1) monitor the implementation of the ACP regulation, (2) determine the ACP's effectiveness in reducing compliance costs, (3) determine the ACP's effectiveness in limiting VOC emissions from consumer products to a level equivalent to the existing consumer products regulation, and (4) identify any significant problems in the implementation of the ACP regulation and propose any future regulatory modifications that may be appropriate.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to work with the U.S. EPA to ensure that the ACP regulation is approved as a revision to the State Implementation Plan (SIP), and to provide in the SIP revision any additional documentation identified as necessary for approvability of the SIP revision under the federal Clean Air Act and U.S. EPA regulations.

I hereby certify that the above is a true and correct copy of Resolution 94-54 as adopted by the Air Resources Board

Pat Hutchens
Board Secretary

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Office of the Secretary

JUN 2 8 1995

RESOURCES AGENCY OF CALIFORNIA

State of California
AIR RESOURCES BOARD

Executive Order G-94-059

WHEREAS, on September 22, 1994, the Air Resources Board (the "Board") conducted a public hearing to consider the amendments to its regulations regarding adoption of the alternative control plan for consumer products;

WHEREAS, following the public hearing on September 22, 1994, the Board adopted Resolution 94-54, in which the Board approved adoption of sections 94540 to 94555, Title 17, California Code of Regulations, as set forth in Attachment A thereto, as modified in accordance with the Board's direction;

WHEREAS, the approved regulations were available for public comment for a period of 15 days in accordance with the provisions of Title 1, California code of Regulations, section 44, with the changes to the originally proposed text clearly indicated; and

WHEREAS, the written comment received during this 15-day period has been considered by the Executive Officer and does not require modification nor reconsideration by the Board of the approved regulations.

NOW, THEREFORE, IT IS ORDERED that the recitals and findings contained in Resolution 94-54 are incorporated herein.

IT IS FURTHER ORDERED that sections 94540 to 94555, Title 17, California Code of Regulations, are hereby adopted as set forth in Attachment A to Resolution 94-54.

Executed this 18 day of May, 1995, at Sacramento, California.

James D. Boyd
Executive Officer

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JUN 2 8 1995

RESOURCES AGENCY OF CALIFORNIA

State of California
AIR RESOURCES BOARD

Resolution 94-55

September 22, 1994

Agenda Item No.: 94-9-3

WHEREAS, the Atmospheric Acidity Protection Act of 1988 (Stats. 1988, ch. 1518, Health and Safety Code sections 39900-39911) directs the Air Resources Board to implement the Atmospheric Acidity Protection Program to determine the nature and extent of potential damage to public health and the State's ecosystems that may be expected to result from atmospheric acidity and to develop measures that may be needed for the protection of public health and sensitive ecosystems within the State;

WHEREAS, the Air Resources Board has been directed to implement the Atmospheric Acidity Program using funds from the Motor Vehicle Account in the State Transportation Fund and from fees on nonvehicular sources of sulfur and nitrogen oxides collected by local and regional air pollution control districts (sections 39906-39909);

WHEREAS, the Air Resources Board has been directed to prepare and submit a report to the Legislature and Governor annually on the progress of the Atmospheric Acidity Protection Program (section 39910);

WHEREAS, the Air Resources Board is to prepare this report with the advice and participation of the Scientific Advisory Committee on Acid Deposition pursuant to Health and Safety Code section 39910;

WHEREAS, the Scientific Advisory Committee on Acid Deposition has reviewed a report titled Atmospheric Acidity Protection Program: Annual Report to the Governor and the Legislature, 1993, dated September 1994, which reports the recent progress of the Air Resources Board towards implementing the Atmospheric Acidity Protection Program;

WHEREAS, the public has received a 30-day notice of the availability of the report for review prior to the public meeting (section 39910(b)).

WHEREAS, the Air Resources Board has reviewed the report, staff recommendation, and comments received, and has held a public meeting.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code section 39910, hereby concurs in the recommendation of the Scientific Advisory Committee on Acid Deposition, approves the report Atmospheric Acidity Protection Program: Annual Report to the Governor and the Legislature, 1993, dated September 1994, and submits this report to the Governor and the Legislature.

State of California
AIR RESOURCES BOARD

Resolution 94-56

October 27, 1994

Agenda Item No.: 94-10-1

WHEREAS, section 43701(b) of the California Health and Safety Code requires the Air Resources Board (the "Board") to examine the feasibility of developing regulations for the retrofit of existing, on-road heavy-duty diesel vehicles to reduce their exhaust emissions, or, if the Board determines that such regulations are not feasible, to report such findings to the Legislature;

WHEREAS, in California, on-road heavy-duty diesel vehicles account for over 30 percent of all on-road, ozone-forming emissions of oxides of nitrogen (NOx) and over 80 percent of all on-road exhaust particulate matter (PM) emissions;

WHEREAS, the Board has determined that regulations for widespread mandatory retrofits of heavy-duty diesel vehicles are not practical or economically feasible for California implementation at this time and has developed a report to the Legislature of these findings entitled "Report to the California Legislature: The Feasibility of Reducing Emissions from Heavy-Duty Diesel Vehicles through Retrofitting Existing Diesel Engines" (the "Retrofit Report");

WHEREAS, the United States Environmental Protection Agency has previously promulgated regulations for the retrofit of existing urban transit buses for reduced PM emissions and such regulations will be applicable to California-based urban transit buses;

WHEREAS, the Board has adopted the nation's most extensive and stringent motor vehicle emissions control and fuels regulations, which have resulted in significant emission reductions;

WHEREAS, the Board believes that significant reductions in total emissions from the heavy-duty diesel vehicle category will continue to be achieved through more stringent new vehicle standards and fleet turnover;

WHEREAS, on November 18, 1993, the Board approved an addition to the Mobile Source Credit Guidelines entitled "Mobile Source Emission Reduction Credits: Guidelines for the Generation of Mobile Source Emission Reduction Credits By Retrofit of Existing Vehicles" (the "Retrofit Guidelines"), dated February 1994;

WHEREAS, the Board has determined that, at the present time, voluntary mobile source credit programs are preferred over mandatory regulations for encouraging emission-reducing retrofits of existing heavy-duty diesel vehicles and engines;

Resolution 94-56

WHEREAS, the Board will reexamine the issue of the feasibility of heavy-duty diesel vehicle retrofits in the future, as changes in legislative requirements, technology, emission reduction needs and vehicle operating characteristics require;

WHEREAS, the Board has held a duly noticed public meeting, as required by California Health and Safety Code 43701(b), to consider approval of the Retrofit Report, and has considered the comments presented by representatives of air pollution control districts, affected industries, and other interested persons and agencies;

WHEREAS, the Board has instructed the staff to add a preamble to the report which presents the issues discussed at the Board's public meeting;

WHEREAS, the Board has instructed the staff to modify the report to ensure that the discussion of the feasibility of retrofitting heavy-duty vehicle engines appropriately reflects the sense of a technically achievable practice as opposed to a program that may not be practical to implement;

NOW, THEREFORE, BE IT RESOLVED that the Board approves the "Report to the California Legislature: The Feasibility of Reducing Emissions from Heavy-Duty Diesel Vehicles through Retrofitting Existing Diesel Engines" and directs the Executive Officer to transmit the report to the Legislature as required by California Health and Safety Code Section 43701(b).

I hereby certify that the above is a true and correct copy of Resolution 94-56, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-57
October 27, 1994

Agenda Item No.: 94-10-3

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, an interagency proposal, Number 2166-185, entitled "Product Studies of the Atmospherically Important Reactions of Alkenes and Aromatic Hydrocarbons," has been submitted by the University of California, Riverside; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2166-185, entitled "Product Studies of the Atmospherically Important Reactions of Alkenes and Aromatic Hydrocarbons," submitted by the University of California, Riverside, for a total amount not to exceed $139,110.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2166-185, entitled "Product Studies of the Atmospherically Important Reactions of Alkenes and Aromatic Hydrocarbons," submitted by the University of California, Riverside, for a total amount not to exceed $139,110.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $139,110.

I hereby certify that the above is a true and correct copy of Resolution 94-57, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-58
October 27, 1994

Agenda Item No.: 94-10-3

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, an interagency research proposal, Number 2167-185 entitled "Evaluation of Factors that Affect Diesel Exhaust Toxicity," has been submitted by the University of California, Riverside; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2167-185, entitled "Evaluation of Factors that Affect Diesel Exhaust Toxicity," submitted by the University of California, Riverside, for a total amount not to exceed $449,973.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2167-185, entitled "Evaluation of Factors that Affect Diesel Exhaust Toxicity," submitted by the University of California, Riverside, for a total amount not to exceed $449,973.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $449,973.

I hereby certify that the above is a true and correct copy of Resolution 94-58, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

STATE OF CALIFORNIA-CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY PETE WILSON, Governor
AIR RESOURCES BOARD
2020 L STREET
P.O. BOX 2815
SACRAMENTO, CA 95812

State of California
AIR RESOURCES BOARD

Notice of Decision and
Response to Significant Environmental Issues

Item: NOTICE OF PUBLIC HEARING TO CONSIDER AMENDMENTS TO THE AREA DESIGNATIONS FOR THE STATE AMBIENT AIR QUALITY STANDARDS

Approved by: Resolution 94-59

Agenda Item No.: 94-11-1

Public Hearing Date: November 9, 1994

Issuing Authority: Air Resources Board

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

Response: N/A

Certified:

Artavia M. Edwards
Regulations Coordinator

Date: May 26, 1995

RECEIVED BY
Office of the Secretary
MAY 26 1995
RESOURCES AGENCY OF CALIFORNIA

State of California
AIR RESOURCES BOARD

Resolution 94-59

November 9, 1994

Agenda Item Number: 94-11-1

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

WHEREAS, the Legislature enacted the California Clean Air Act of 1988 (the Act; Stats. 1988, ch. 1568) declaring that it is necessary that the State ambient air quality standards (the State standards) be attained by the earliest practical date to protect the public health, particularly the health of children, older people, and those with respiratory diseases;

WHEREAS, in order to attain the State standards, the Act mandates a comprehensive program of emission reduction measures and planning requirements for the State and the local air pollution control and air quality management districts (the districts) in areas where the State standards are not attained;

WHEREAS, the Act in Health and Safety Code section 39607(e) requires the Board to establish and periodically review criteria for designating an air basin as nonattainment or attainment for any State standard set forth in the California Code of Regulations, Title 17, section 70200 (ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, suspended particulate matter or PM10, sulfates, lead, hydrogen sulfide, and visibility reducing particles);

WHEREAS, on June 8, 1989, the Board adopted and on June 15, 1990, May 15, 1992, December 10, 1992, and November 18, 1993, the Board amended the California Code of Regulations, Title 17, sections 70300 through 70306, and Appendices 1 through 4, thereof, establishing designation criteria (the adopted criteria) consistent with the requirements of the Act;

WHEREAS, the Act in Health and Safety Code section 39608(a) requires the Board, in consultation with the districts, to identify and classify each air basin in California as nonattainment, attainment, or unclassified on a pollutant-by-pollutant basis pursuant to the designation criteria established by the Board under Health and Safety Code section 39607(e);

WHEREAS, the Act in Health and Safety Code section 39608(c) also requires the Board to review the area designations annually and update them as new information becomes available;

WHEREAS, on June 9, 1989, the Board approved the initial area designations which are contained in the California Code of Regulations, Title 17,

sections 60200 through 60209, and has updated the area designations during each subsequent year;

WHEREAS, in consultation with the districts and considering comments received from public agencies, industry representatives, and interested persons, the ARB staff has proposed amendments to the area designations for a number of specific areas of the State for ozone, carbon monoxide, sulfur dioxide, and sulfates;

WHEREAS, the amendment to the area designation for ozone by operation of law is based on the criteria contained in the Health and Safety Code section 40925.5(a);

WHEREAS, the proposed amendments to the area designations for carbon monoxide, sulfur dioxide, and sulfates are based on the adopted criteria contained in the California Code of Regulations, Title 17, sections 70300 through 70306, and Appendices 1 through 4, thereof;

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

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of Chapter 3.5 (commencing with section 11340), Part 1, Division 3, Title 2 of the Government Code and the Board has considered the testimony presented by interested persons and the ARB staff; and

WHEREAS, the Board finds that:

1. The proposed revisions to the area designations comply with the requirements of Health and Safety Code section 39608;

2. The proposed revisions to the area designations listed in the California Code of Regulations, Title 17, sections 60200 through 60209 are consistent with the designation criteria in the California Code of Regulations, Title 17, sections 70300 through 70306, and Appendices 1 through 4, thereof;

3. This regulatory action will not have a significant economic impact on any public agency, small business, or private persons or businesses other than small businesses;

4. This regulatory action will not have a significant adverse impact on the environment. In fact, it should ultimately result in environmental benefits because it is part of a multiple step program designed to achieve and maintain the State standards; and

5. There is no alternative considered by the Board which would be more effective in carrying out the purposes of this regulatory action or that would be as effective and less burdensome to affected private persons than the proposed action.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby adopts the amendments to the California Code of Regulations, Title 17, sections 60201, 60202, 60204, and 60206.

I hereby certify that the above is a true and correct copy of Resolution 94-59, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

RECEIVED BY
Office of the Secretary

MAY 26 1995

RESOURCES AGENCY OF CALIFORNIA

State of California
AIR RESOURCES BOARD

Resolution No. 94-60

November 15, 1994

WHEREAS, the Legislature in Health and Safety Code section 39602 has designated the state Air Resources Board (ARB or Board) as the air pollution control agency for all purposes set forth in federal law;

WHEREAS, the ARB is responsible for the preparation of the state implementation plan (SIP) for attaining and maintaining the national ambient air quality standards (NAAQS) as required by the federal Clean Air Act (the Act; 42 U.S.C. section 7401 et seq.), and to this end is directed by Health and Safety Code section 39602 to coordinate the activities of all local and regional air pollution control and air quality management districts (APCDs or AQMDs, respectively; collectively Districts) necessary to comply with the Act;

WHEREAS, section 39602 also provides that the SIP shall include only those provisions necessary to meet the requirements of the Act;

WHEREAS, the Act as amended in 1990 requires the State of California to submit to the United States Environmental Protection Agency (U.S. EPA) a revision to the SIP for ozone nonattainment areas designated as "serious," "severe," and "extreme" in accordance with section 181 of the Act by November 15, 1994;

WHEREAS, section 182(e)(2)(A) of the Act requires the revision for these serious and above nonattainment areas to demonstrate attainment of the national ozone standard by the applicable attainment date specified in section 181 ("attainment demonstration");

WHEREAS, section 182(c)(2)(B) of the Act requires the revision for each serious and above nonattainment area to demonstrate at least a three percent per year average reduction in emissions of volatile organic compounds (VOCs) after 1996, or to demonstrate that a reduction by a lesser amount reflects all measures that can feasibly be implemented in the area ("post 1996 rate of progress demonstration");

WHEREAS, section 182(c)(3) of the Act requires the SIP to include an enhanced vehicle inspection and maintenance (I/M) program for all serious, severe, and extreme non-attainment areas;

WHEREAS, the following eight areas are serious and above ozone nonattainment areas and the districts responsible for their air quality have prepared, or are in the process of preparing, revisions to their portions of the SIP for review by the Board and submittal to the U.S. EPA: South Coast Air Basin (South Coast AQMD); Southeast Desert Nonattainment Area (Mojave

Desert AQMD); Southeast Desert Air Basin (SCAQMD); Sacramento Metropolitan Area (Sacramento Metropolitan AQMD, Feather River AQMD, Placer County APCD, El Dorado County APCD; and Yolo-Solano County Unified APCD); San Diego County (San Diego County APCD); San Joaquin Valley (San Joaquin Valley Unified APCD); and San Joaquin Valley Nonattainment Planning Area (Kern County APCD);

WHEREAS, the air quality plans submitted by the districts indicate that while the total emission reductions estimated in each plan will be achieved, the exact mix of mobile source control strategies and the quantity of reductions associated with them may be different than the districts estimated for those sources under the sole jurisdiction of the ARB and the U.S. EPA;

WHEREAS, the U.S. EPA is in the process of imposing federal implementation plans (FIPs) on the following three districts, due to their failure to meet certain requirements set forth in the Act prior to its amendment in 1990: the SCAQMD, the SMAQMD, and the Ventura County APCD;

WHEREAS, the Act allows SIP measures which meet all applicable requirements to be substituted for FIP measures;

WHEREAS, the Legislature, in Divisions 6 and 7 of the Food and Agricultural Code (section 11401 et seq.), has granted the Department of Pesticide Regulation (DPR) the authority to regulate economic poisons in their pesticidal use;

WHEREAS, the DPR has proposed measures to reduce VOC emissions by the year 2005 from agricultural and commercial pesticide applications through regulations which DPR will adopt by November 1995;

WHEREAS, the Bureau of Automotive Repair (BAR) is authorized to adopt, implement, and enforce an enhanced vehicle inspection and maintenance (I/M) program pursuant to Health and Safety Code section 44000 et seq., as amended in 1994 by SB 521 (Stats. 1994, c. 29) SB 198 (Stats. 1994, c. 28), and AB 2018 (Stats 1994, c. 27);

WHEREAS, the ARB has primary responsibility for the control of air pollution from vehicular sources, including motor vehicle fuels, as specified in sections 39002, 39500, and Part 5 (commencing with section 43000) of the Health and Safety Code, and for ensuring that the Districts meet their responsibilities under the Act pursuant to sections 39002, 39500, 39602, 40469, and 41650 of the Health and Safety Code;

WHEREAS, the ARB has been directed by the Legislature to regulate consumer products in order to reduce emissions of VOCs pursuant to section 41712 of the Health and Safety Code;

WHEREAS, the ARB is authorized by Health and Safety Code section 39600 to do such acts as may be necessary for the proper execution of its powers and duties;

WHEREAS, sections 39515 and 39516 of the Health and Safety Code provide that any duty may be delegated to the Board's Executive Officer as the Board deems appropriate;

WHEREAS, the Board staff has prepared statewide SIP elements for consumer products and mobile sources for inclusion in the 1994 SIP submittal;

WHEREAS, the consumer products element consists of near-term, mid-term, and long-term measures comprising a mix of existing regulations, regulations which will cover additional product categories not subject to the current program, and measures which rely on new technologies along with market incentives and consumer education;

WHEREAS, the mobile source element is comprised of existing control strategies and near-term and long-term state and federal measures which will achieve emission reductions from on- and off-road mobile sources including passenger cars, light-duty trucks, medium-duty vehicles, heavy-duty vehicles, and off-road equipment;

WHEREAS, federal law as set forth in section 110(l) of the Act and Title 40, C.F.R, section 51.102 requires that one or more public hearings, preceded by at least 30 days notice and opportunity for public review, must be conducted prior to the adoption and submittal to U.S. EPA of any SIP revision;

WHEREAS, CEQA and Board regulations require that prior to taking any action or engaging in any activity which may have a significant adverse effect on the environment, alternatives and mitigation measures to minimize any significant impact will be described and imposed by the Board where feasible;

WHEREAS, several assessments of the economic costs and benefits associated with the statewide SIP element have been prepared and made available to the Board and the public;

WHEREAS, a Staff Report which summarizes and explains the contents of the proposed SIP revision (including descriptions of both statewide and local regional elements), the requirements applicable to the SIP revision, and the environmental impacts of the statewide mobile source and consumer product elements, along with alternatives and mitigation to reduce such impacts, has been available for public review at least 30 days prior to the hearing;

WHEREAS, in consideration of the Staff Report; the proposed statewide and local/regional SIP elements; the environmental documentation prepared by Board staff and by the districts; the written and oral testimony presented by the districts, the public, interested government agencies, and the regulated industry; and the economic assessments prepared by Board staff, the Office of Planning and Research, the Business, Housing and Transportation Agency, and the independent consultant M.Cubed, the Board finds:

1. Healthful air must be achieved through an intensive and coordinated local, state, and federal effort to attain the NAAQS for ozone by the dates specified in the federal Clean Air Act.

2. While California's existing regulations have reduced statewide exposure to unhealthful ozone concentrations by about 50% since 1980, along with the frequency and severity of ozone pollution episodes, more must be done to attain and maintain the NAAQS.

3. Emission sources under federal jurisdiction are increasingly significant contributors to ozone pollution as emissions from other source categories are reduced through state and local controls.

4. Mobile source controls on new cars, trucks, buses, off-road equipment, and other mobile source categories are a vital element of the attainment equation in every affected area, without which serious nonattainment areas will not be able to meet the 1999 attainment deadline specified in the Act and without which severe and extreme areas cannot reach their projected reduction targets.

5. The ARB and the U.S. EPA share responsibility for controlling new mobile sources and both must adopt stringent controls on the sources within their respective jurisdictions.

6. The control of emissions from existing vehicles and engines through an enhanced inspection and maintenance program, fuel conversions, old vehicle scrappage, and transportation and strategies to reduce vehicle miles traveled is dependent upon both state and local commitments.

7. Area sources such as solvents, architectural coatings, adhesives, pesticides, and other coatings and consumer products contribute an increasing percentage of ozone emissions and must be controlled by state and local agencies.

8. The SIP must be submitted to and approved by the U.S. EPA prior to promulgation of the federal implementation plans (FIPs) for Sacramento, Ventura, and the South Coast scheduled for early next year in order to replace the FIP and reinstate California's control over its air pollution program.

9. The new mobile source control measures proposed for adoption and implementation by the ARB within the next 30 months for medium and heavy-duty vehicles, as well as the additional mid-term measures proposed for later adoption and the long-term measures which rely on the development of advanced technology, will supplement ARB's current stringent standards for vehicles and fuels and are the most ambitious measures which are feasible, supplying a central strategy to reduce emissions from the most significant single source of ozone precursors in the State.

10. The mid-term and long-term consumer products regulations which will supplement existing regulations will achieve significant VOC reductions statewide; are necessary to ensure that the South Coast Air Basin will meet ozone NAAQS; will lead to the development of programs which will foster innovative technologies for long-term application; and will continue to provide flexibility to the product manufacturers through the use of market incentives.

11. The development of innovative technologies, upon which long-term emission reductions from consumer products are dependent, necessitate increased cooperation from, and coordination with, the U.S. EPA and the encouragement of controls at the national level.

12. Controls on VOC emissions from the agricultural and structural use of economic poisons have been under study and development for several years by the DPR (formerly within the Department of Food and Agriculture), the ARB, and the districts, and are a feasible, cost-effective, and necessary means of progressing towards attaining the ozone NAAQS statewide.

13. The control measures proposed by DPR should be included in the SIP with an expeditious adoption schedule.

14. The U.S. EPA has a clear and present duty to control several categories of mobile sources on a national level and must rapidly and diligently meet its responsibilities if California is to attain the ozone NAAQS by the dates set forth in the Act.

15. The mobile source control measures identified in the proposed SIP for adoption by U.S. EPA are feasible, cost-effective, socially acceptable, and would provide a larger market base to manufacturers, which would encourage the development of new technology.

16. The state measures are cost-effective in consideration of the substantial air quality improvements and public health benefits which will result from their implementation, and are more cost-effective than their counterparts proposed in the FIP.

17. The ARB is the lead agency for the mobile source and consumer product elements of the SIP, has considered the environmental analysis set forth in Volume II of the Staff Report, and concurs in the discussion of potential impacts.

18. While there may be adverse secondary environmental impacts on air, water, and solid waste disposal facilities from the accelerated vehicle retirement program and the electric vehicle program, the effects are speculative and cannot be quantified until the scope of these programs is defined by proposed regulations, or (for electric vehicles) until the regulations are implemented and the state of battery technology is known.

19. As regulations implementing the new mobile source measures are developed, detailed environmental impact analyses, including a discussion of regulatory alternatives and mitigation measures, will be performed in conjunction with the rulemaking process.

20. At this time there are no feasible mitigation measures which the ARB can impose to lessen the potential adverse impacts of the mobile source measures on the environment, and no less stringent alternatives which will accomplish the goal imposed by federal law with fewer potential environmental impacts.

21. The potential adverse impacts identified for the mobile source measures are vastly outweighed by the substantial air quality benefits, especially the reduction of VOC emissions, which will result from their adoption and implementation.

22. Future regulatory activities involved with the consumer products control program are anticipated to entail additional or expanded applications of the existing regulations and the Alternative Control Plan, which were subject to detailed environmental analyses which concluded that no significant adverse environmental impacts would result, and hence no adverse impacts are anticipated.

23. As the SIP measures for consumer products are developed into regulations, potential impacts, alternatives, and mitigation measures will be analyzed in detail, particularly with regard to the possibility of stratospheric ozone depletion, global warming, creation of localized VOC "hot spots," generation of toxic air contaminants, potential increased use due to reduced efficacy, and VOC or toxic loading to water treatment facilities.

24. The Board has considered alternatives to the mobile source measures and consumer products measures and have identified no feasible alternatives at this time which would reduce or eliminate any potential adverse impacts, while achieving necessary emission reductions.

25. Mobile source and consumer products regulations which have been adopted and are proposed for inclusion in the SIP have undergone environmental review by the Board at the time of their adoption and no further analysis is required at this time.

26. Reconciliation has been achieved between the ARB and those Districts which assigned control measures and emission reductions to mobile source and other state measures, so that emission inventories and anticipated emission reductions from these sources are consistently and accurately reflected in the local plans.

27. The local plans which are dependent upon state measures for attainment of the ozone NAAQS have indicated their need for these measures and requested their inclusion as part of the local SIP.

28. The long-term measures which are dependent upon the development of advanced control technology as permitted by section 182(e)(5) of the Act are set forth as long-range measures in the South Coast attainment strategy and, together with the state and federal advanced technology measures which will be implemented by 2010, meet the requirements of the Act pertaining to innovative technology.

29. The state elements of the SIP are necessary to meet the requirements of section 182 of the Act, including the requirements to submit attainment and post-1996 rate-of-progress demonstrations for serious, severe, and extreme nonattainment areas.

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby adopts the state elements of the SIP pertaining to mobile sources and consumer products as modified by the Board, and directs the Executive Officer to forward the new measures, along with any adopted measures for these sources which have not yet been submitted, to the U.S. EPA for inclusion in the SIP; to be effective, for purposes of federal law, in the nonattainment areas subject to the Act's 1994 attainment and ROP requirements upon approval or conditional approval by the U.S. EPA.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to work with the U.S. EPA and take necessary action to resolve any completeness or approvability issues that may arise regarding the SIP submissions.

BE IT FURTHER RESOLVED, that the Board approves the VOC pesticide measure adopted by DPR, and directs the Executive Officer to forward the measure to the U.S. EPA for conditional approval and inclusion in the SIP for the serious, severe, and extreme nonattainment areas, and to continue to work with DPR to assure the adoption of regulations to implement the measure by the dates committed to.

BE IT FURTHER RESOLVED, that the Board approves inclusion of the enhanced I/M program, as being developed by the Bureau of Automotive Repair, and directs the Executive Officer to forward the measure to the U.S. EPA for inclusion in the SIP for the serious, severe, and extreme nonattainment areas upon its adoption by BAR.

BE IT FURTHER RESOLVED, that except as provided herein or in previous SIP submittals, the Board does not intend the regulations which comprise the state element of the SIP to be federally enforceable in any area of California beyond the serious, severe, and extreme nonattainment areas.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to work with the local air districts to resolve any discrepancies in the mobile source emissions inventory by

evaluating, improving and further enhancing EMFAC7G to include activity related information and growth factors in order to develop the most accurate emissions inventory possible.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to continue to develop and bring to the Board for consideration by the dates committed to those mobile source and consumer product measures which have not been adopted in regulatory form in order to ensure that any conditional approval by the U.S. EPA progresses to full approval.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to continue to review cost effectiveness and technological feasibility of proposed control strategies and to propose necessary and appropriate modifications to the control strategies; furthermore, the Board directs the Executive Officer to continue to review the inventory allocations between the mobile and stationary source sectors.

BE IT FURTHER RESOLVED, that the Executive Officer is directed to perform the environmental analysis required by CEQA in conjunction with the rulemaking process for the new mobile source and consumer products measures which will be developed into regulations, and to ensure that the environmental impacts identified in the Staff Report, and any others which are subsequently identified, are avoided or mitigated to the extent feasible.

BE IT FURTHER RESOLVED, that the Board certifies pursuant to 40 C.F.R. section 51.102 that the state elements being submitted as a SIP revision were adopted after notice and public hearing as required by 40 C.F.R. section 51.102, and directs the Executive Officer to submit the appropriate supporting documentation to U.S. EPA along with the SIP submittal.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to convey to U.S. EPA the Board's emphatic assertion that it is necessary for U.S. EPA immediately to begin to develop and adopt those measures for the sources under federal jurisdiction which the ARB has identified as being the responsibility of the U.S. EPA to control, and to continue to meet and confer with the U.S. EPA and other interested persons, including the District, industry, and the public, until the necessary federal measures are proposed, adopted, and implemented.

BE IT FURTHER RESOLVED, that pursuant to CEQA the Board hereby approves the written responses to significant environmental issues that have been raised regarding the state elements of this SIP revision, as set forth in Attachment A hereto.

I hereby certify that the above is a true and correct copy of Resolution 94-60 as adopted by the Air Resources Board

Pat Hutchens

Pat Hutchens, Board Secretary

STATE OF CALIFORNIA—CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY PETE WILSON, *Governor*

AIR RESOURCES BOARD
2020 L STREET
P.O. BOX 2815
SACRAMENTO, CA 95814-2815

Notice of Decision and Response to Significant Environmental Issues

Item: PUBLIC HEARING TO CONSIDER APPROVAL OF A REVISION TO THE CALIFORNIA STATE IMPLEMENTATION PLAN

Adopted November 15, 1994, by:

Resolution 94-60 - Consideration of California's State Implementation Plan

Agenda Item No.: 94-11-2

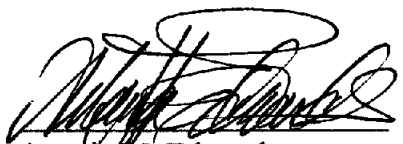
Public Hearing Date: November 9, 1994

Issuing Authority: Air Resources Board

Contact Person: Leslie M. Krinsk, Senior Staff Counsel
(916) 322-2884

Comment: See attached Resolution and Attachment A thereto, titled "Response to Significant Environmental Issues"

Response: See above.

Certified: 
Artavia M. Edwards
Regulations Coordinator

Date: November 21, 1994

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State of California
AIR RESOURCES BOARD

Resolution No. 94-60

November 15, 1994

WHEREAS, the Legislature in Health and Safety Code section 39602 has designated the state Air Resources Board (ARB or Board) as the air pollution control agency for all purposes set forth in federal law;

WHEREAS, the ARB is responsible for the preparation of the state implementation plan (SIP) for attaining and maintaining the national ambient air quality standards (NAAQS) as required by the federal Clean Air Act (the Act; 42 U.S.C. section 7401 et seq.), and to this end is directed by Health and Safety Code section 39602 to coordinate the activities of all local and regional air pollution control and air quality management districts (APCDs or AQMDs, respectively; collectively Districts) necessary to comply with the Act;

WHEREAS, section 39602 also provides that the SIP shall include only those provisions necessary to meet the requirements of the Act;

WHEREAS, the Act as amended in 1990 requires the State of California to submit to the United States Environmental Protection Agency (U.S. EPA) a revision to the SIP for ozone nonattainment areas designated as "serious," "severe," and "extreme" in accordance with section 181 of the Act by November 15, 1994;

WHEREAS, section 182(e)(2)(A) of the Act requires the revision for these serious and above nonattainment areas to demonstrate attainment of the national ozone standard by the applicable attainment date specified in section 181 ("attainment demonstration");

WHEREAS, section 182(c)(2)(B) of the Act requires the revision for each serious and above nonattainment area to demonstrate at least a three percent per year average reduction in emissions of volatile organic compounds (VOCs) after 1996, or to demonstrate that a reduction by a lesser amount reflects all measures that can feasibly be implemented in the area ("post 1996 rate of progress demonstration");

WHEREAS, section 182(c)(3) of the Act requires the SIP to include an enhanced vehicle inspection and maintenance (I/M) program for all serious, severe, and extreme non-attainment areas;

WHEREAS, the following eight areas are serious and above ozone nonattainment areas and the districts responsible for their air quality have prepared, or are in the process of preparing, revisions to their portions of the SIP for review by the Board and submittal to the U.S. EPA: South Coast Air Basin (South Coast AQMD); Southeast Desert Nonattainment Area (Mojave

Desert AQMD); Southeast Desert Air Basin (SCAQMD); Sacramento Metropolitan Area (Sacramento Metropolitan AQMD, Feather River AQMD, Placer County APCD, El Dorado County APCD; and Yolo-Solano County Unified APCD); San Diego County (San Diego County APCD); San Joaquin Valley (San Joaquin Valley Unified APCD); and San Joaquin Valley Nonattainment Planning Area (Kern County APCD);

WHEREAS, the air quality plans submitted by the districts indicate that while the total emission reductions estimated in each plan will be achieved, the exact mix of mobile source control strategies and the quantity of reductions associated with them may be different than the districts estimated for those sources under the sole jurisdiction of the ARB and the U.S. EPA;

WHEREAS, the U.S. EPA is in the process of imposing federal implementation plans (FIPs) on the following three districts, due to their failure to meet certain requirements set forth in the Act prior to its amendment in 1990: the SCAQMD, the SMAQMD, and the Ventura County APCD;

WHEREAS, the Act allows SIP measures which meet all applicable requirements to be substituted for FIP measures;

WHEREAS, the Legislature, in Divisions 6 and 7 of the Food and Agricultural Code (section 11401 et seq.), has granted the Department of Pesticide Regulation (DPR) the authority to regulate economic poisons in their pesticidal use;

WHEREAS, the DPR has proposed measures to reduce VOC emissions by the year 2005 from agricultural and commercial pesticide applications through regulations which DPR will adopt by November 1995;

WHEREAS, the Bureau of Automotive Repair (BAR) is authorized to adopt, implement, and enforce an enhanced vehicle inspection and maintenance (I/M) program pursuant to Health and Safety Code section 44000 et seq., as amended in 1994 by SB 521 (Stats. 1994, c. 29) SB 198 (Stats. 1994, c. 28), and AB 2018 (Stats 1994, c. 27);

WHEREAS, the ARB has primary responsibility for the control of air pollution from vehicular sources, including motor vehicle fuels, as specified in sections 39002, 39500, and Part 5 (commencing with section 43000) of the Health and Safety Code, and for ensuring that the Districts meet their responsibilities under the Act pursuant to sections 39002, 39500, 39602, 40469, and 41650 of the Health and Safety Code;

WHEREAS, the ARB has been directed by the Legislature to regulate consumer products in order to reduce emissions of VOCs pursuant to section 41712 of the Health and Safety Code;

WHEREAS, the ARB is authorized by Health and Safety Code section 39600 to do such acts as may be necessary for the proper execution of its powers and duties;

WHEREAS, sections 39515 and 39516 of the Health and Safety Code provide that any duty may be delegated to the Board's Executive Officer as the Board deems appropriate;

WHEREAS, the Board staff has prepared statewide SIP elements for consumer products and mobile sources for inclusion in the 1994 SIP submittal;

WHEREAS, the consumer products element consists of near-term, mid-term, and long-term measures comprising a mix of existing regulations, regulations which will cover additional product categories not subject to the current program, and measures which rely on new technologies along with market incentives and consumer education;

WHEREAS, the mobile source element is comprised of existing control strategies and near-term and long-term state and federal measures which will achieve emission reductions from on- and off-road mobile sources including passenger cars, light-duty trucks, medium-duty vehicles, heavy-duty vehicles, and off-road equipment;

WHEREAS, federal law as set forth in section 110(l) of the Act and Title 40, C.F.R, section 51.102 requires that one or more public hearings, preceded by at least 30 days notice and opportunity for public review, must be conducted prior to the adoption and submittal to U.S. EPA of any SIP revision;

WHEREAS, CEQA and Board regulations require that prior to taking any action or engaging in any activity which may have a significant adverse effect on the environment, alternatives and mitigation measures to minimize any significant impact will be described and imposed by the Board where feasible;

WHEREAS, several assessments of the economic costs and benefits associated with the statewide SIP element have been prepared and made available to the Board and the public;

WHEREAS, a Staff Report which summarizes and explains the contents of the proposed SIP revision (including descriptions of both statewide and local regional elements), the requirements applicable to the SIP revision, and the environmental impacts of the statewide mobile source and consumer product elements, along with alternatives and mitigation to reduce such impacts, has been available for public review at least 30 days prior to the hearing;

WHEREAS, in consideration of the Staff Report; the proposed statewide and local/regional SIP elements; the environmental documentation prepared by Board staff and by the districts; the written and oral testimony presented by the districts, the public, interested government agencies, and the regulated industry; and the economic assessments prepared by Board staff, the Office of Planning and Research, the Business, Housing and Transportation Agency, and the independent consultant M.Cubed, the Board finds:

1. Healthful air must be achieved through an intensive and coordinated local, state, and federal effort to attain the NAAQS for ozone by the dates specified in the federal Clean Air Act.

2. While California's existing regulations have reduced statewide exposure to unhealthful ozone concentrations by about 50% since 1980, along with the frequency and severity of ozone pollution episodes, more must be done to attain and maintain the NAAQS.

3. Emission sources under federal jurisdiction are increasingly significant contributors to ozone pollution as emissions from other source categories are reduced through state and local controls.

4. Mobile source controls on new cars, trucks, buses, off-road equipment, and other mobile source categories are a vital element of the attainment equation in every affected area, without which serious nonattainment areas will not be able to meet the 1999 attainment deadline specified in the Act and without which severe and extreme areas cannot reach their projected reduction targets.

5. The ARB and the U.S. EPA share responsibility for controlling new mobile sources and both must adopt stringent controls on the sources within their respective jurisdictions.

6. The control of emissions from existing vehicles and engines through an enhanced inspection and maintenance program, fuel conversions, old vehicle scrappage, and transportation and strategies to reduce vehicle miles traveled is dependent upon both state and local commitments.

7. Area sources such as solvents, architectural coatings, adhesives, pesticides, and other coatings and consumer products contribute an increasing percentage of ozone emissions and must be controlled by state and local agencies.

8. The SIP must be submitted to and approved by the U.S. EPA prior to promulgation of the federal implementation plans (FIPs) for Sacramento, Ventura, and the South Coast scheduled for early next year in order to replace the FIP and reinstate California's control over its air pollution program.

9. The new mobile source control measures proposed for adoption and implementation by the ARB within the next 30 months for medium and heavy-duty vehicles, as well as the additional mid-term measures proposed for later adoption and the long-term measures which rely on the development of advanced technology, will supplement ARB's current stringent standards for vehicles and fuels and are the most ambitious measures which are feasible, supplying a central strategy to reduce emissions from the most significant single source of ozone precursors in the State.

10. The mid-term and long-term consumer products regulations which will supplement existing regulations will achieve significant VOC reductions statewide; are necessary to ensure that the South Coast Air Basin will meet ozone NAAQS; will lead to the development of programs which will foster innovative technologies for long-term application; and will continue to provide flexibility to the product manufacturers through the use of market incentives.

11. The development of innovative technologies, upon which long-term emission reductions from consumer products are dependent, necessitate increased cooperation from, and coordination with, the U.S. EPA and the encouragement of controls at the national level.

12. Controls on VOC emissions from the agricultural and structural use of economic poisons have been under study and development for several years by the DPR (formerly within the Department of Food and Agriculture), the ARB, and the districts, and are a feasible, cost-effective, and necessary means of progressing towards attaining the ozone NAAQS statewide.

13. The control measures proposed by DPR should be included in the SIP with an expeditious adoption schedule.

14. The U.S. EPA has a clear and present duty to control several categories of mobile sources on a national level and must rapidly and diligently meet its responsibilities if California is to attain the ozone NAAQS by the dates set forth in the Act.

15. The mobile source control measures identified in the proposed SIP for adoption by U.S. EPA are feasible, cost-effective, socially acceptable, and would provide a larger market base to manufacturers, which would encourage the development of new technology.

16. The state measures are cost-effective in consideration of the substantial air quality improvements and public health benefits which will result from their implementation, and are more cost-effective than their counterparts proposed in the FIP.

17. The ARB is the lead agency for the mobile source and consumer product elements of the SIP, has considered the environmental analysis set forth in Volume II of the Staff Report, and concurs in the discussion of potential impacts.

18. While there may be adverse secondary environmental impacts on air, water, and solid waste disposal facilities from the accelerated vehicle retirement program and the electric vehicle program, the effects are speculative and cannot be quantified until the scope of these programs is defined by proposed regulations, or (for electric vehicles) until the regulations are implemented and the state of battery technology is known.

19. As regulations implementing the new mobile source measures are developed, detailed environmental impact analyses, including a discussion of regulatory alternatives and mitigation measures, will be performed in conjunction with the rulemaking process.

20. At this time there are no feasible mitigation measures which the ARB can impose to lessen the potential adverse impacts of the mobile source measures on the environment, and no less stringent alternatives which will accomplish the goal imposed by federal law with fewer potential environmental impacts.

21. The potential adverse impacts identified for the mobile source measures are vastly outweighed by the substantial air quality benefits, especially the reduction of VOC emissions, which will result from their adoption and implementation.

22. Future regulatory activities involved with the consumer products control program are anticipated to entail additional or expanded applications of the existing regulations and the Alternative Control Plan, which were subject to detailed environmental analyses which concluded that no significant adverse environmental impacts would result, and hence no adverse impacts are anticipated.

23. As the SIP measures for consumer products are developed into regulations, potential impacts, alternatives, and mitigation measures will be analyzed in detail, particularly with regard to the possibility of stratospheric ozone depletion, global warming, creation of localized VOC "hot spots," generation of toxic air contaminants, potential increased use due to reduced efficacy, and VOC or toxic loading to water treatment facilities.

24. The Board has considered alternatives to the mobile source measures and consumer products measures and have identified no feasible alternatives at this time which would reduce or eliminate any potential adverse impacts, while achieving necessary emission reductions.

25. Mobile source and consumer products regulations which have been adopted and are proposed for inclusion in the SIP have undergone environmental review by the Board at the time of their adoption and no further analysis is required at this time.

26. Reconciliation has been achieved between the ARB and those Districts which assigned control measures and emission reductions to mobile source and other state measures, so that emission inventories and anticipated emission reductions from these sources are consistently and accurately reflected in the local plans.

27. The local plans which are dependent upon state measures for attainment of the ozone NAAQS have indicated their need for these measures and requested their inclusion as part of the local SIP.

28. The long-term measures which are dependent upon the development of advanced control technology as permitted by section 182(e)(5) of the Act are set forth as long-range measures in the South Coast attainment strategy and, together with the state and federal advanced technology measures which will be implemented by 2010, meet the requirements of the Act pertaining to innovative technology.

29. The state elements of the SIP are necessary to meet the requirements of section 182 of the Act, including the requirements to submit attainment and post-1996 rate-of-progress demonstrations for serious, severe, and extreme nonattainment areas.

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby adopts the state elements of the SIP pertaining to mobile sources and consumer products as modified by the Board, and directs the Executive Officer to forward the new measures, along with any adopted measures for these sources which have not yet been submitted, to the U.S. EPA for inclusion in the SIP; to be effective, for purposes of federal law, in the nonattainment areas subject to the Act's 1994 attainment and ROP requirements upon approval or conditional approval by the U.S. EPA.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to work with the U.S. EPA and take necessary action to resolve any completeness or approvability issues that may arise regarding the SIP submissions.

BE IT FURTHER RESOLVED, that the Board approves the VOC pesticide measure adopted by DPR, and directs the Executive Officer to forward the measure to the U.S. EPA for conditional approval and inclusion in the SIP for the serious, severe, and extreme nonattainment areas, and to continue to work with DPR to assure the adoption of regulations to implement the measure by the dates committed to.

BE IT FURTHER RESOLVED, that the Board approves inclusion of the enhanced I/M program, as being developed by the Bureau of Automotive Repair, and directs the Executive Officer to forward the measure to the U.S. EPA for inclusion in the SIP for the serious, severe, and extreme nonattainment areas upon its adoption by BAR.

BE IT FURTHER RESOLVED, that except as provided herein or in previous SIP submittals, the Board does not intend the regulations which comprise the state element of the SIP to be federally enforceable in any area of California beyond the serious, severe, and extreme nonattainment areas.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to work with the local air districts to resolve any discrepancies in the mobile source emissions inventory by

evaluating, improving and further enhancing EMFAC7G to include activity related information and growth factors in order to develop the most accurate emissions inventory possible.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to continue to develop and bring to the Board for consideration by the dates committed to those mobile source and consumer product measures which have not been adopted in regulatory form in order to ensure that any conditional approval by the U.S. EPA progresses to full approval.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to continue to review cost effectiveness and technological feasibility of proposed control strategies and to propose necessary and appropriate modifications to the control strategies; furthermore, the Board directs the Executive Officer to continue to review the inventory allocations between the mobile and stationary source sectors.

BE IT FURTHER RESOLVED, that the Executive Officer is directed to perform the environmental analysis required by CEQA in conjunction with the rulemaking process for the new mobile source and consumer products measures which will be developed into regulations, and to ensure that the environmental impacts identified in the Staff Report, and any others which are subsequently identified, are avoided or mitigated to the extent feasible.

BE IT FURTHER RESOLVED, that the Board certifies pursuant to 40 C.F.R. section 51.102 that the state elements being submitted as a SIP revision were adopted after notice and public hearing as required by 40 C.F.R. section 51.102, and directs the Executive Officer to submit the appropriate supporting documentation to U.S. EPA along with the SIP submittal.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to convey to U.S. EPA the Board's emphatic assertion that it is necessary for U.S. EPA immediately to begin to develop and adopt those measures for the sources under federal jurisdiction which the ARB has identified as being the responsibility of the U.S. EPA to control, and to continue to meet and confer with the U.S. EPA and other interested persons, including the District, industry, and the public, until the necessary federal measures are proposed, adopted, and implemented.

BE IT FURTHER RESOLVED, that pursuant to CEQA the Board hereby approves the written responses to significant environmental issues that have been raised regarding the state elements of this SIP revision, as set forth in Attachment A hereto.

I hereby certify that the above is a true and correct copy of Resolution 94-60 as adopted by the Air Resources Board

Pat Hutchens

Pat Hutchens, Board Secretary

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Office of the Secretary
NOV 21 1994
RESOURCES AGENCY OF CALIFORNIA

Comments of Roadway Package System, Inc.

Comment: Because a 1.0 g/bhp-hr NOx standard engine is not feasible, requiring its use will result in more trucks being licensed out-of-state to avoid meeting California emission standards. If these vehicles relocate to other states but continue to serve the California market, it would increase their VMT and actually increase emissions. More trucks will be needed to move the same amount of freight, ultimately leading to the deterioration of air quality.

Response: Because the 1.0 g/bhp-hr NOx standard is not being proposed for adoption in these proceedings, this is not the appropriate time to assess the technological feasibility of the measure. The technological feasibility will be addressed when the Board considers the adoption of a regulation requiring the use of 1.0 g/bhp-hr NOx engines.

The proposed SIP includes the expansion of locally implemented demand-side programs and market incentives that could be implemented in a future timeframe. Under one of these programs, captive local fleets could be subject to a 1.0 g/bhp-hr NOx engine standard. This requirement is targeted at captive local fleets, which are not likely to re-license out-of-state. Therefore, the staff does not believe that the deterioration of air quality referred to in the comment will occur.

Significant Environmental Issue: Accelerated vehicle retirement programs may not be the most cost effective means in which to achieve the necessary emission reductions.

Response: Accelerated vehicle retirement (AVR) programs are an effective near-term method to reduce emissions from mobile sources. AVR does not depend upon the evolution, development, and implementation of new technologies. Because of this, AVR programs can bring immediate, although shorter term, air quality benefits.

AVR programs will help bring newer, cleaner cars onto the road. The ARB's existing Low-Emission Vehicle program has already caused auto makers to invest in developing new emission control technology for the light-duty vehicle fleet. Although new cars do not replace vehicles scrapped in AVR programs on a one-to-one basis, there will some stimulation of new vehicle sales as a result of AVR programs. These new cars will meet stringent emission standards and have more durable emission control systems, making them cleaner than older cars throughout their lifetimes.

Pilot AVR programs can be operated at fairly low costs. This will allow the ARB staff to thoroughly evaluate and verify the air quality benefits of vehicle scrappage before the program is expanded.

The estimated approximate cost of implementing an early vehicle retirement program in the South Coast is $8,100 per ton of ROG and NOx reduced, which is within the range of cost-effective programs.

Significant Environmental Issue: Accelerated vehicle scrappage will result in increased numbers of new vehicles sold. This will necessitate increased vehicle production and increased environmental impact from vehicle production.

Response: The number of vehicles scrapped in proposed accelerated vehicle retirement programs should be placed in the context of the total number of vehicles discarded each year. According to the Integrated Waste Management Board, approximately 1.63 million vehicles were scrapped in California in 1991.

In other words, the proposed accelerated vehicle retirement program will increase the rate of vehicle retirement by about two percent between 1996 and 1998. Between 1999 and 2010, the rate of vehicle retirement will increase by about 4.5 percent as a result of these programs. There will be significant environmental benefits from this small increase in retirements because the dirtiest vehicles will be replaced by much cleaner models.

The ARB staff does not believe that vehicles scrapped in these programs will be replaced by new cars. However, even if all the vehicles scrapped were replaced by new cars, the impacts of slightly increased vehicle manufacture are not expected to significantly affect the California environment. First, new vehicle sales (and production) resulting from accelerated vehicle retirement programs are expected to be small, particularly when placed in the context of normal variations in annual vehicle sales. Accordingly, the impacts of the small increase in vehicle production (increased use of raw materials, waste water disposal, etc.) as a result of accelerated vehicle retirement are expected to be small, and may not be proportional to increases in production. For example, emissions from vehicle manufacture do not increase in direct proportion to the number of vehicles produced. Thus, the small undefinable increases in vehicle production which might result from accelerated vehicle retirement programs will likely not result in commensurate emission increases. Second, because the vast majority of vehicle production facilities are located well outside of California, the small environmental impacts which may occur will not affect California.

Significant Environmental Issue: Older vehicles from out-of-state will be imported into California to take advantage of accelerated vehicle retirement programs, which will cause the program not to produce the expected emission reductions.

Response: The ARB staff does not expect vehicles to be imported into California for the purpose of participating in accelerated vehicle retirement programs. This issue has already been addressed by the ARB through its Mobile Source Emission Reduction Credits guidelines which specify that vehicles must be currently registered with the Department of Motor Vehicles and must have been registered for at least one year to be eligible for the program. (The guidelines also require that vehicles must be driven to the dismantling site under their own power, not be so damaged that their continued operation is unlikely or impossible, and that certain accessories be present and functional.) Further, all vehicles certified to a "49-state" standard that are brought into California are required to pay a $300 smog impact fee. Importers will also incur costs to procure vehicles, transport them to California, and ensure that they are operational before they can collect the incentive. The projected purchase price for a vehicle in an AVR program is only $700. Therefore, aside from the administrative restrictions on the vehicles that can participate in an AVR program, staff does not believe that it will be economically viable to import vehicles from other states to take advantage of these programs.

Responses to Issues Raised Regarding Consumer Products

Comment: Requiring a decrease in the VOC content of consumer-applied pesticides of 85 percent, while commercial pesticides are only required to decrease their VOC content by 20 to 30 percent, would result in decreased efficacy of the consumer products and, therefore, increased use of higher-VOC commercial pesticides to replace the inefficaious low-VOC consumer products. This may result in a net increase in total VOC emissions.

Response: It is incorrect to assume that the efficacy of pesticide products is dependent upon their VOC content. Pesticide efficacy is primarily a function of the active ingredient or ingredients, which typically comprise only a small percentage of the total VOC content of the product. Therefore, reducing the VOC content of pesticide products will not necessarily result in less efficacious products. In addition, California law requires that any future regulations adopted by the ARB must be technologically and commercially feasible (e.g., products must continue to efficaciously perform the job they are intended to perform). Before adopting any regulation limiting the VOC content of pesticides in consumer products, the ARB will insure that reformulated products will be efficacious. Furthermore, it is unrealistic to believe that a significant number of consumers would substitute higher cost and inconvenient commercial application pesticides for their small, low volume insecticide needs. And even if some household pesticides were replaced by commercial applications, VOC emissions would not necessarily increase since there are non- and low-VOC commercial products available.

Comment: The SIP should take into account the relative photochemical reactivity of consumer products emissions. Failure to do so may jeopardize attainment, because reducing VOC mass emissions alone may not reduce ambient ozone concentrations as much as the ARB has assumed.

Response: As suggested by the commenter, the ARB modified the proposed SIP to state that in developing consumer products regulations, the ARB will evaluate the feasibility of incorporating reactivity considerations into the control strategy. This process should insure that the regulations ultimately adopted will reduce ambient ozone concentrations in the most effective manner. In addition, ARB staff has previously responded to reactivity comments in each of the three consumer products rulemakings that have previously been adopted by the Board. The ARB's responses are contained in the Final Statement of Reasons for these rulemaking actions, which are incorporated by reference herein.

RESPONSES TO COMMENTS FROM LLOYD S. DAVIS:

1. Comment: Stratospheric ozone is the primary source of ground level ozone in California, making regulation of ozone precursor emissions unwarranted.

Response: There is no scientific evidence that stratospheric ozone contributes significantly to exceedances of the federal ozone standard in California. The meteorology represented in the South Coast Air Quality Management District's five episode discussed by the commenter *is not* consistent with a strong probability that the exceedances during these episodes were due entirely, or even partially, to the presence of ozone-rich air that had descended from the stratosphere. There is significant evidence that anthropogenic emissions of oxides of nitrogen (NOx) and volatile organic compounds (VOC) do contribute significantly to these exceedances. If intrusion of stratospheric ozone were responsible for elevated concentrations in the lower atmosphere, we would find those elevated concentrations in populated and unpopulated areas alike. Instead elevated ozone concentrations are commonly found only in areas having substantial emissions of NOx and VOCs (or in areas impacted by transport from such areas).

2. Comment: Information regarding the types of models and model inputs were not available for review.

Response: The modeling and modeling inputs used by the districts are provided in the individual modeling reports for each area submitted to and approved by U.S. EPA.

3. Comment: The data used to determine the need for ozone precursor controls is questionable because the modeling inputs are not substantiated. Specifically the boundary conditions are not correctly identified.

Response: The SIP was prepared with the best data available. In all modeling studies, observations, both surface and aloft, are used to set boundary conditions, if available. While the lack of data to establish some boundary conditions does introduce uncertainties, established protocols for quantifying and managing these uncertainties have been followed. The higher concentrations of ozone aloft mentioned by the commenter were not measured at the boundaries, but in layers within the modeling region. These layers are the result of surface generated pollutants being trapped aloft from the previous night, as has been documented in several areas of the state.

4. Comment: The chemistry simulated by modeling is not substantiated.

Response: The chemistry simulated by the computer models used is supported by a considerable body of evidence. The nighttime reduction of ozone by reaction with NOx is well understood and has been replicated by the models' chemical mechanism. It is only during the daytime, when solar radiation is available to drive photochemical reactions, that ozone concentrations increase. The models correctly have predicted peak ozone in the South Coast over a ten year period based on observed reductions of NOx and VOCs.

5. Comments: Emissions of NOx provide greater benefits than detriment.

Response: Due to its scavenging effect, reductions of NOx emissions may increase local ozone levels, but they reduce downwind ozone concentrations. When the effects of transport are considered, NOx emissions do not provide an overall benefit. Moreover, NOx emissions play a substantial role in the formation of particulate matter (PM). Studies have shown that PM may be a greater health risk to humans than ozone.

6. Comment: The SIP fails to account for biolgenic VOCs.

Response: The modeling relied on in the SIP does account for biogenic VOCs. The uncertainties in the inventory of biogenic VOCs have been addressed through sensitivity studies, which indicate that biogenic VOCs are not important in predicting current ozone levels in California.

Responses to Issues Raised Regarding Locomotive Regulation

Comment: The AAR proposal is technology-stretching but feasible. The ARB proposal is technologically infeasible because it is based on technologies that are unproven.

Response: Staff agrees that current diesel locomotive technology cannot meet the standards proposed in the SIP. The ARB proposal, like most of our proposals, is technology-forcing. However, staff believes that the reductions requested will be technologically feasible in the timeframe available. New locomotives generally emit 9-10 g/hp-hr NOx. The SIP proposes that this be reduced to 5 g/hp-hr by 2000, and 4 g/hp-hr by 2005, a reduction of about 50 percent for new locomotives. This should be achievable through technology transfer from on-road diesels. The proposed standards recognize that locomotives face a different operating environment than trucks and may not be able to fully utilize all on-road technology. This is why a 4 g/hp-hr standard is proposed for new locomotives in 2005 whereas a 2 g/hp-hr truck standard (a 50 percent reduction) is proposed for 2002, three years earlier. Staff believes that these disparate standards will require comparable levels of technological effort. The staff believes that the reductions for new locomotives are both reasonable and technologically feasible.

Comment: The ARB proposal will subject the national railroad network to demands in California that are inconsistent with the rest of the nation.

Response: The ARB proposal suggests that in addition to the national requirements that will affect rail operations in all air basins, a more stringent fleet average should be met in the SCAB, because of its extreme needs. This fleet average is set at a level equivalent to the new locomotive standards that the ARB is suggesting the U.S. EPA adopt. The fleet average requirement could be met by directing the newer clean locomotives to the SCAB, or by greater reductions than mandated for some locomotives so that less than complete use of new locomotives would be required. The FIP and the AAR proposal both include a fleet average requirement for the SCAB, so the ARB proposal does not differ from other alternatives offered in this respect.

Comment: The proposed requirements will increase rail freight costs and may ultimately lead to higher overall NOx emissions through more truck VMT.

Response: The potential for intermodal shifts (primarily from rail to truck) to result from proposed locomotive regulations was raised by the industry in earlier meetings. The ARB currently has a study nearing completion assessing the potential for a goods movement shift to result from proposed regulations that would affect the goods movement modes. In preliminary analyses, the following aspects are noted: (1) railroads are a more efficient way to move goods over the long haul, resulting in 2-3 times less emissions per ton-mile than trucking; (2) in the absence of locomotive regulations, the proposed on-road truck regulations would reduce that benefit, such that locomotives and rails would be essentially equivalent

means of goods movement from an emissions perspective; and (3) this would potentially cause a shift to the railroads (although the extent is unclear since rail movement takes longer and is perceived as less reliable). The estimated cost-effectiveness of reducing truck emissions is comparable to that for reducing rail emissions. Therefore, the impact on freight rates would not be expected to be substantial, and the staff does not believe that significant modal shift would occur. Further, even if such shifts did occur, the emissions impact would probably not be significant in the long run, since the truck emissions will be reduced in the same timeframe.

Comment: Clean locomotives are less efficient, so the number of locomotives pulling the train will increase.

Response: There is no reason to believe that a clean locomotive would be significantly less efficient. We expect the locomotive standards to be achievable with diesel-powered locomotives. The argument is probably based on an assumption that the standards would require natural gas-powered locomotives. Early experience with liquefied natural gas (LNG) for locomotives required engine derating at notch 8 to avoid detonation problems. However, further technological development has allowed these locomotives to develop full rated horsepower (Department of the Navy, Letter addressed to Ms. Jackie Lourenco, ARB, dated October 6, 1994). These LNG locomotive conversions are EMD 635 engines that develop around 3000 horsepower. The Burlington Northern Railroad is developing similar technology for a 4000 horsepower EMD 710 engine (op cit). This is the locomotive engine model currently being marketed by EMD. Thus, in the long-term, no increase in the number of locomotives even under a LNG scenario is anticipated.

Comment: Standards based on g/bhp-hr will constrain the current trend towards increasing horsepower. Higher horsepower units mean that fewer locomotives are needed to pull the same load, with a resultant reduction in emissions. The standards should instead be expressed in percentage reduction from the baseline.

Response: The emissions data with which staff is familiar do not indicate that emissions are higher on a g/hp-hr basis for high horsepower units than for lower horsepower ones. Why General Electric Transportation Systems (GETS) believes that this would be so is not clear. The same technological requirements should exist, regardless of engine size and horsepower. Staff agrees that the trend towards higher horsepower units is probably positive from an emissions perspective. At least part of the reason that percentage reductions seem more attractive to industry is that the baseline emissions for locomotives are not well established. Different testing facilities currently use different test procedures and different composite duty cycles. It is important that baseline conditions be established, and that compliance rules be enforced in consistent ways. In presenting its net reductions for locomotives, the ARB staff has assumed that the current average locomotive emits about 12 g/hp-hr NOx.

Comment: The intent of the CAA is that the U.S. EPA should set standards based on economic, technical, and other information provided by a variety of parties, including the railroad industry. The ARB is usurping that role by suggesting nationwide standards in the SIP that, if accepted, will define the nationwide standards. The ARB should rely on the U.S. EPA to set standards for new and remanufactured locomotives.

Response: Locomotives are a significant contributor to California's NOx inventory, and are currently not subject to emission controls, other than locally enforced opacity limits. They should do their share towards cleaning up California's air. The ARB recognizes that the 1990 CAA preempted California from adopting and enforcing emission standards for new locomotives. We do retain authority to set operational controls and in-use requirements, however. In suggesting standards for new locomotives, the ARB is merely stating what levels of controls we believe are necessary and feasible for locomotives based on our discussions with the railroad engines, locomotive manufacturers, and other interested parties.

STATE OF CALIFORNIA--CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY PETE WILSON, *Governor*

AIR RESOURCES BOARD
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Notice of Decision and Response to Significant Environmental Issues

Item: PUBLIC HEARING TO CONSIDER APPROVAL OF A REVISION TO THE CALIFORNIA STATE IMPLEMENTATION PLAN

Adopted November 15, 1994, by:

Resolution 94-60 - Consideration of California's State Implementation Plan

Agenda Item No.: 94-11-2

Public Hearing Date: November 9, 1994

Issuing Authority: Air Resources Board

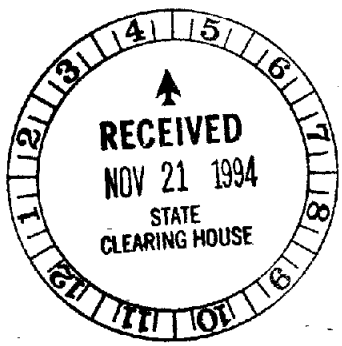
Contact Person: Leslie M. Krinsk, Senior Staff Counsel
(916) 322-2884

Comment: See attached Resolution and Attachment A thereto, titled "Response to Significant Environmental Issues"

Response: See above.

Certified:
Artavia M. Edwards
Regulations Coordinator

Date: November 21, 1994



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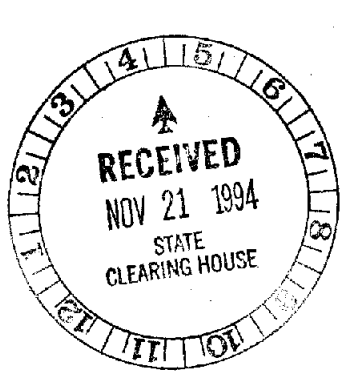

State of California
AIR RESOURCES BOARD

Resolution No. 94-60

November 15, 1994

WHEREAS, the Legislature in Health and Safety Code section 39602 has designated the state Air Resources Board (ARB or Board) as the air pollution control agency for all purposes set forth in federal law;

WHEREAS, the ARB is responsible for the preparation of the state implementation plan (SIP) for attaining and maintaining the national ambient air quality standards (NAAQS) as required by the federal Clean Air Act (the Act; 42 U.S.C. section 7401 et seq.), and to this end is directed by Health and Safety Code section 39602 to coordinate the activities of all local and regional air pollution control and air quality management districts (APCDs or AQMDs, respectively; collectively Districts) necessary to comply with the Act;

WHEREAS, section 39602 also provides that the SIP shall include only those provisions necessary to meet the requirements of the Act;

WHEREAS, the Act as amended in 1990 requires the State of California to submit to the United States Environmental Protection Agency (U.S. EPA) a revision to the SIP for ozone nonattainment areas designated as "serious," "severe," and "extreme" in accordance with section 181 of the Act by November 15, 1994;

WHEREAS, section 182(e)(2)(A) of the Act requires the revision for these serious and above nonattainment areas to demonstrate attainment of the national ozone standard by the applicable attainment date specified in section 181 ("attainment demonstration");

WHEREAS, section 182(c)(2)(B) of the Act requires the revision for each serious and above nonattainment area to demonstrate at least a three percent per year average reduction in emissions of volatile organic compounds (VOCs) after 1996, or to demonstrate that a reduction by a lesser amount reflects all measures that can feasibly be implemented in the area ("post 1996 rate of progress demonstration");

WHEREAS, section 182(c)(3) of the Act requires the SIP to include an enhanced vehicle inspection and maintenance (I/M) program for all serious, severe, and extreme non-attainment areas;

WHEREAS, the following eight areas are serious and above ozone nonattainment areas and the districts responsible for their air quality have prepared, or are in the process of preparing, revisions to their portions of the SIP for review by the Board and submittal to the U.S. EPA: South Coast Air Basin (South Coast AQMD); Southeast Desert Nonattainment Area (Mojave

Desert AQMD); Southeast Desert Air Basin (SCAQMD); Sacramento Metropolitan Area (Sacramento Metropolitan AQMD, Feather River AQMD, Placer County APCD, El Dorado County APCD; and Yolo-Solano County Unified APCD); San Diego County (San Diego County APCD); San Joaquin Valley (San Joaquin Valley Unified APCD); and San Joaquin Valley Nonattainment Planning Area (Kern County APCD);

WHEREAS, the air quality plans submitted by the districts indicate that while the total emission reductions estimated in each plan will be achieved, the exact mix of mobile source control strategies and the quantity of reductions associated with them may be different than the districts estimated for those sources under the sole jurisdiction of the ARB and the U.S. EPA;

WHEREAS, the U.S. EPA is in the process of imposing federal implementation plans (FIPs) on the following three districts, due to their failure to meet certain requirements set forth in the Act prior to its amendment in 1990: the SCAQMD, the SMAQMD, and the Ventura County APCD;

WHEREAS, the Act allows SIP measures which meet all applicable requirements to be substituted for FIP measures;

WHEREAS, the Legislature, in Divisions 6 and 7 of the Food and Agricultural Code (section 11401 et seq.), has granted the Department of Pesticide Regulation (DPR) the authority to regulate economic poisons in their pesticidal use;

WHEREAS, the DPR has proposed measures to reduce VOC emissions by the year 2005 from agricultural and commercial pesticide applications through regulations which DPR will adopt by November 1995;

WHEREAS, the Bureau of Automotive Repair (BAR) is authorized to adopt, implement, and enforce an enhanced vehicle inspection and maintenance (I/M) program pursuant to Health and Safety Code section 44000 et seq., as amended in 1994 by SB 521 (Stats. 1994, c. 29) SB 198 (Stats. 1994, c. 28), and AB 2018 (Stats 1994, c. 27);

WHEREAS, the ARB has primary responsibility for the control of air pollution from vehicular sources, including motor vehicle fuels, as specified in sections 39002, 39500, and Part 5 (commencing with section 43000) of the Health and Safety Code, and for ensuring that the Districts meet their responsibilities under the Act pursuant to sections 39002, 39500, 39602, 40469, and 41650 of the Health and Safety Code;

WHEREAS, the ARB has been directed by the Legislature to regulate consumer products in order to reduce emissions of VOCs pursuant to section 41712 of the Health and Safety Code;

WHEREAS, the ARB is authorized by Health and Safety Code section 39600 to do such acts as may be necessary for the proper execution of its powers and duties;

WHEREAS, sections 39515 and 39516 of the Health and Safety Code provide that any duty may be delegated to the Board's Executive Officer as the Board deems appropriate;

WHEREAS, the Board staff has prepared statewide SIP elements for consumer products and mobile sources for inclusion in the 1994 SIP submittal;

WHEREAS, the consumer products element consists of near-term, mid-term, and long-term measures comprising a mix of existing regulations, regulations which will cover additional product categories not subject to the current program, and measures which rely on new technologies along with market incentives and consumer education;

WHEREAS, the mobile source element is comprised of existing control strategies and near-term and long-term state and federal measures which will achieve emission reductions from on- and off-road mobile sources including passenger cars, light-duty trucks, medium-duty vehicles, heavy-duty vehicles, and off-road equipment;

WHEREAS, federal law as set forth in section 110(l) of the Act and Title 40, C.F.R, section 51.102 requires that one or more public hearings, preceded by at least 30 days notice and opportunity for public review, must be conducted prior to the adoption and submittal to U.S. EPA of any SIP revision;

WHEREAS, CEQA and Board regulations require that prior to taking any action or engaging in any activity which may have a significant adverse effect on the environment, alternatives and mitigation measures to minimize any significant impact will be described and imposed by the Board where feasible;

WHEREAS, several assessments of the economic costs and benefits associated with the statewide SIP element have been prepared and made available to the Board and the public;

WHEREAS, a Staff Report which summarizes and explains the contents of the proposed SIP revision (including descriptions of both statewide and local regional elements), the requirements applicable to the SIP revision, and the environmental impacts of the statewide mobile source and consumer product elements, along with alternatives and mitigation to reduce such impacts, has been available for public review at least 30 days prior to the hearing;

WHEREAS, in consideration of the Staff Report; the proposed statewide and local/regional SIP elements; the environmental documentation prepared by Board staff and by the districts; the written and oral testimony presented by the districts, the public, interested government agencies, and the regulated industry; and the economic assessments prepared by Board staff, the Office of Planning and Research, the Business, Housing and Transportation Agency, and the independent consultant M.Cubed, the Board finds:

1. Healthful air must be achieved through an intensive and coordinated local, state, and federal effort to attain the NAAQS for ozone by the dates specified in the federal Clean Air Act.

2. While California's existing regulations have reduced statewide exposure to unhealthful ozone concentrations by about 50% since 1980, along with the frequency and severity of ozone pollution episodes, more must be done to attain and maintain the NAAQS.

3. Emission sources under federal jurisdiction are increasingly significant contributors to ozone pollution as emissions from other source categories are reduced through state and local controls.

4. Mobile source controls on new cars, trucks, buses, off-road equipment, and other mobile source categories are a vital element of the attainment equation in every affected area, without which serious nonattainment areas will not be able to meet the 1999 attainment deadline specified in the Act and without which severe and extreme areas cannot reach their projected reduction targets.

5. The ARB and the U.S. EPA share responsibility for controlling new mobile sources and both must adopt stringent controls on the sources within their respective jurisdictions.

6. The control of emissions from existing vehicles and engines through an enhanced inspection and maintenance program, fuel conversions, old vehicle scrappage, and transportation and strategies to reduce vehicle miles traveled is dependent upon both state and local commitments.

7. Area sources such as solvents, architectural coatings, adhesives, pesticides, and other coatings and consumer products contribute an increasing percentage of ozone emissions and must be controlled by state and local agencies.

8. The SIP must be submitted to and approved by the U.S. EPA prior to promulgation of the federal implementation plans (FIPs) for Sacramento, Ventura, and the South Coast scheduled for early next year in order to replace the FIP and reinstate California's control over its air pollution program.

9. The new mobile source control measures proposed for adoption and implementation by the ARB within the next 30 months for medium and heavy-duty vehicles, as well as the additional mid-term measures proposed for later adoption and the long-term measures which rely on the development of advanced technology, will supplement ARB's current stringent standards for vehicles and fuels and are the most ambitious measures which are feasible, supplying a central strategy to reduce emissions from the most significant single source of ozone precursors in the State.

10. The mid-term and long-term consumer products regulations which will supplement existing regulations will achieve significant VOC reductions statewide; are necessary to ensure that the South Coast Air Basin will meet ozone NAAQS; will lead to the development of programs which will foster innovative technologies for long-term application; and will continue to provide flexibility to the product manufacturers through the use of market incentives.

11. The development of innovative technologies, upon which long-term emission reductions from consumer products are dependent, necessitate increased cooperation from, and coordination with, the U.S. EPA and the encouragement of controls at the national level.

12. Controls on VOC emissions from the agricultural and structural use of economic poisons have been under study and development for several years by the DPR (formerly within the Department of Food and Agriculture), the ARB, and the districts, and are a feasible, cost-effective, and necessary means of progressing towards attaining the ozone NAAQS statewide.

13. The control measures proposed by DPR should be included in the SIP with an expeditious adoption schedule.

14. The U.S. EPA has a clear and present duty to control several categories of mobile sources on a national level and must rapidly and diligently meet its responsibilities if California is to attain the ozone NAAQS by the dates set forth in the Act.

15. The mobile source control measures identified in the proposed SIP for adoption by U.S. EPA are feasible, cost-effective, socially acceptable, and would provide a larger market base to manufacturers, which would encourage the development of new technology.

16. The state measures are cost-effective in consideration of the substantial air quality improvements and public health benefits which will result from their implementation, and are more cost-effective than their counterparts proposed in the FIP.

17. The ARB is the lead agency for the mobile source and consumer product elements of the SIP, has considered the environmental analysis set forth in Volume II of the Staff Report, and concurs in the discussion of potential impacts.

18. While there may be adverse secondary environmental impacts on air, water, and solid waste disposal facilities from the accelerated vehicle retirement program and the electric vehicle program, the effects are speculative and cannot be quantified until the scope of these programs is defined by proposed regulations, or (for electric vehicles) until the regulations are implemented and the state of battery technology is known.

19. As regulations implementing the new mobile source measures are developed, detailed environmental impact analyses, including a discussion of regulatory alternatives and mitigation measures, will be performed in conjunction with the rulemaking process.

20. At this time there are no feasible mitigation measures which the ARB can impose to lessen the potential adverse impacts of the mobile source measures on the environment, and no less stringent alternatives which will accomplish the goal imposed by federal law with fewer potential environmental impacts.

21. The potential adverse impacts identified for the mobile source measures are vastly outweighed by the substantial air quality benefits, especially the reduction of VOC emissions, which will result from their adoption and implementation.

22. Future regulatory activities involved with the consumer products control program are anticipated to entail additional or expanded applications of the existing regulations and the Alternative Control Plan, which were subject to detailed environmental analyses which concluded that no significant adverse environmental impacts would result, and hence no adverse impacts are anticipated.

23. As the SIP measures for consumer products are developed into regulations, potential impacts, alternatives, and mitigation measures will be analyzed in detail, particularly with regard to the possibility of stratospheric ozone depletion, global warming, creation of localized VOC "hot spots," generation of toxic air contaminants, potential increased use due to reduced efficacy, and VOC or toxic loading to water treatment facilities.

24. The Board has considered alternatives to the mobile source measures and consumer products measures and have identified no feasible alternatives at this time which would reduce or eliminate any potential adverse impacts, while achieving necessary emission reductions.

25. Mobile source and consumer products regulations which have been adopted and are proposed for inclusion in the SIP have undergone environmental review by the Board at the time of their adoption and no further analysis is required at this time.

26. Reconciliation has been achieved between the ARB and those Districts which assigned control measures and emission reductions to mobile source and other state measures, so that emission inventories and anticipated emission reductions from these sources are consistently and accurately reflected in the local plans.

27. The local plans which are dependent upon state measures for attainment of the ozone NAAQS have indicated their need for these measures and requested their inclusion as part of the local SIP.

28. The long-term measures which are dependent upon the development of advanced control technology as permitted by section 182(e)(5) of the Act are set forth as long-range measures in the South Coast attainment strategy and, together with the state and federal advanced technology measures which will be implemented by 2010, meet the requirements of the Act pertaining to innovative technology.

29. The state elements of the SIP are necessary to meet the requirements of section 182 of the Act, including the requirements to submit attainment and post-1996 rate-of-progress demonstrations for serious, severe, and extreme nonattainment areas.

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby adopts the state elements of the SIP pertaining to mobile sources and consumer products as modified by the Board, and directs the Executive Officer to forward the new measures, along with any adopted measures for these sources which have not yet been submitted, to the U.S. EPA for inclusion in the SIP; to be effective, for purposes of federal law, in the nonattainment areas subject to the Act's 1994 attainment and ROP requirements upon approval or conditional approval by the U.S. EPA.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to work with the U.S. EPA and take necessary action to resolve any completeness or approvability issues that may arise regarding the SIP submissions.

BE IT FURTHER RESOLVED, that the Board approves the VOC pesticide measure adopted by DPR, and directs the Executive Officer to forward the measure to the U.S. EPA for conditional approval and inclusion in the SIP for the serious, severe, and extreme nonattainment areas, and to continue to work with DPR to assure the adoption of regulations to implement the measure by the dates committed to.

BE IT FURTHER RESOLVED, that the Board approves inclusion of the enhanced I/M program, as being developed by the Bureau of Automotive Repair, and directs the Executive Officer to forward the measure to the U.S. EPA for inclusion in the SIP for the serious, severe, and extreme nonattainment areas upon its adoption by BAR.

BE IT FURTHER RESOLVED, that except as provided herein or in previous SIP submittals, the Board does not intend the regulations which comprise the state element of the SIP to be federally enforceable in any area of California beyond the serious, severe, and extreme nonattainment areas.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to work with the local air districts to resolve any discrepancies in the mobile source emissions inventory by

evaluating, improving and further enhancing EMFAC7G to include activity related information and growth factors in order to develop the most accurate emissions inventory possible.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to continue to develop and bring to the Board for consideration by the dates committed to those mobile source and consumer product measures which have not been adopted in regulatory form in order to ensure that any conditional approval by the U.S. EPA progresses to full approval.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to continue to review cost effectiveness and technological feasibility of proposed control strategies and to propose necessary and appropriate modifications to the control strategies; furthermore, the Board directs the Executive Officer to continue to review the inventory allocations between the mobile and stationary source sectors.

BE IT FURTHER RESOLVED, that the Executive Officer is directed to perform the environmental analysis required by CEQA in conjunction with the rulemaking process for the new mobile source and consumer products measures which will be developed into regulations, and to ensure that the environmental impacts identified in the Staff Report, and any others which are subsequently identified, are avoided or mitigated to the extent feasible.

BE IT FURTHER RESOLVED, that the Board certifies pursuant to 40 C.F.R. section 51.102 that the state elements being submitted as a SIP revision were adopted after notice and public hearing as required by 40 C.F.R. section 51.102, and directs the Executive Officer to submit the appropriate supporting documentation to U.S. EPA along with the SIP submittal.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to convey to U.S. EPA the Board's emphatic assertion that it is necessary for U.S. EPA immediately to begin to develop and adopt those measures for the sources under federal jurisdiction which the ARB has identified as being the responsibility of the U.S. EPA to control, and to continue to meet and confer with the U.S. EPA and other interested persons, including the District, industry, and the public, until the necessary federal measures are proposed, adopted, and implemented.

BE IT FURTHER RESOLVED, that pursuant to CEQA the Board hereby approves the written responses to significant environmental issues that have been raised regarding the state elements of this SIP revision, as set forth in Attachment A hereto.

I hereby certify that the above is a true and correct copy of Resolution 94-60 as adopted by the Air Resources Board

Pat Hutchens

Pat Hutchens, Board Secretary

Comments of Roadway Package System, Inc.

Comment: Because a 1.0 g/bhp-hr NOx standard engine is not feasible, requiring its use will result in more trucks being licensed out-of-state to avoid meeting California emission standards. If these vehicles relocate to other states but continue to serve the California market, it would increase their VMT and actually increase emissions. More trucks will be needed to move the same amount of freight, ultimately leading to the deterioration of air quality.

Response: Because the 1.0 g/bhp-hr NOx standard is not being proposed for adoption in these proceedings, this is not the appropriate time to assess the technological feasibility of the measure. The technological feasibility will be addressed when the Board considers the adoption of a regulation requiring the use of 1.0 g/bhp-hr NOx engines.

The proposed SIP includes the expansion of locally implemented demand-side programs and market incentives that could be implemented in a future timeframe. Under one of these programs, captive local fleets could be subject to a 1.0 g/bhp-hr NOx engine standard. This requirement is targeted at captive local fleets, which are not likely to re-license out-of-state. Therefore, the staff does not believe that the deterioration of air quality referred to in the comment will occur.

Significant Environmental Issue: Accelerated vehicle retirement programs may not be the most cost effective means in which to achieve the necessary emission reductions.

Response: Accelerated vehicle retirement (AVR) programs are an effective near-term method to reduce emissions from mobile sources. AVR does not depend upon the evolution, development, and implementation of new technologies. Because of this, AVR programs can bring immediate, although shorter term, air quality benefits.

AVR programs will help bring newer, cleaner cars onto the road. The ARB's existing Low-Emission Vehicle program has already caused auto makers to invest in developing new emission control technology for the light-duty vehicle fleet. Although new cars do not replace vehicles scrapped in AVR programs on a one-to-one basis, there will some stimulation of new vehicle sales as a result of AVR programs. These new cars will meet stringent emission standards and have more durable emission control systems, making them cleaner than older cars throughout their lifetimes.

Pilot AVR programs can be operated at fairly low costs. This will allow the ARB staff to thoroughly evaluate and verify the air quality benefits of vehicle scrappage before the program is expanded.

The estimated approximate cost of implementing an early vehicle retirement program in the South Coast is $8,100 per ton of ROG and NOx reduced, which is within the range of cost-effective programs.

Significant Environmental Issue: Accelerated vehicle scrappage will result in increased numbers of new vehicles sold. This will necessitate increased vehicle production and increased environmental impact from vehicle production.

Response: The number of vehicles scrapped in proposed accelerated vehicle retirement programs should be placed in the context of the total number of vehicles discarded each year. According to the Integrated Waste Management Board, approximately 1.63 million vehicles were scrapped in California in 1991.

In other words, the proposed accelerated vehicle retirement program will increase the rate of vehicle retirement by about two percent between 1996 and 1998. Between 1999 and 2010, the rate of vehicle retirement will increase by about 4.5 percent as a result of these programs. There will be significant environmental benefits from this small increase in retirements because the dirtiest vehicles will be replaced by much cleaner models.

The ARB staff does not believe that vehicles scrapped in these programs will be replaced by new cars. However, even if all the vehicles scrapped **were** replaced by new cars, the impacts of slightly increased vehicle manufacture are not expected to significantly affect the California environment. First, new vehicle sales (and production) resulting from accelerated vehicle retirement programs are expected to be small, particularly when placed in the context of normal variations in annual vehicle sales. Accordingly, the impacts of the small increase in vehicle production (increased use of raw materials, waste water disposal, etc.) as a result of accelerated vehicle retirement are expected to be small, and may not be proportional to increases in production. For example, emissions from vehicle manufacture do not increase in direct proportion to the number of vehicles produced. Thus, the small undefinable increases in vehicle production which might result from accelerated vehicle retirement programs will likely not result in commensurate emission increases. Second, because the vast majority of vehicle production facilities are located well outside of California, the small environmental impacts which may occur will not affect California.

Significant Environmental Issue: Older vehicles from out-of-state will be imported into California to take advantage of accelerated vehicle retirement programs, which will cause the program not to produce the expected emission reductions.

Response: The ARB staff does not expect vehicles to be imported into California for the purpose of participating in accelerated vehicle retirement programs. This issue has already been addressed by the ARB through its Mobile Source Emission Reduction Credits guidelines which specify that vehicles must be currently registered with the Department of Motor Vehicles and must have been registered for at least one year to be eligible for the program. (The guidelines also require that vehicles must be driven to the dismantling site under their own power, not be so damaged that their continued operation is unlikely or impossible, and that certain accessories be present and functional.) Further, all vehicles certified to a "49-state" standard that are brought into California are required to pay a $300 smog impact fee. Importers will also incur costs to procure vehicles, transport them to California, and ensure that they are operational before they can collect the incentive. The projected purchase price for a vehicle in an AVR program is only $700. Therefore, aside from the administrative restrictions on the vehicles that can participate in an AVR program, staff does not believe that it will be economically viable to import vehicles from other states to take advantage of these programs.

Responses to Issues Raised Regarding Consumer Products

Comment: Requiring a decrease in the VOC content of consumer-applied pesticides of 85 percent, while commercial pesticides are only required to decrease their VOC content by 20 to 30 percent, would result in decreased efficacy of the consumer products and, therefore, increased use of higher-VOC commercial pesticides to replace the inefficaious low-VOC consumer products. This may result in a net increase in total VOC emissions.

Response: It is incorrect to assume that the efficacy of pesticide products is dependent upon their VOC content. Pesticide efficacy is primarily a function of the active ingredient or ingredients, which typically comprise only a small percentage of the total VOC content of the product. Therefore, reducing the VOC content of pesticide products will not necessarily result in less efficacious products. In addition, California law requires that any future regulations adopted by the ARB must be technologically and commercially feasible (e.g., products must continue to efficaciously perform the job they are intended to perform). Before adopting any regulation limiting the VOC content of pesticides in consumer products, the ARB will insure that reformulated products will be efficacious. Furthermore, it is unrealistic to believe that a significant number of consumers would substitute higher cost and inconvenient commercial application pesticides for their small, low volume insecticide needs. And even if some household pesticides were replaced by commercial applications, VOC emissions would not necessarily increase since there are non- and low-VOC commercial products available.

Comment: The SIP should take into account the relative photochemical reactivity of consumer products emissions. Failure to do so may jeopardize attainment, because reducing VOC mass emissions alone may not reduce ambient ozone concentrations as much as the ARB has assumed.

Response: As suggested by the commenter, the ARB modified the proposed SIP to state that in developing consumer products regulations, the ARB will evaluate the feasibility of incorporating reactivity considerations into the control strategy. This process should insure that the regulations ultimately adopted will reduce ambient ozone concentrations in the most effective manner. In addition, ARB staff has previously responded to reactivity comments in each of the three consumer products rulemakings that have previously been adopted by the Board. The ARB's responses are contained in the Final Statement of Reasons for these rulemaking actions, which are incorporated by reference herein.

RESPONSES TO COMMENTS FROM LLOYD S. DAVIS:

1. Comment: Stratospheric ozone is the primary source of ground level ozone in California, making regulation of ozone precursor emissions unwarranted.

Response: There is no scientific evidence that stratospheric ozone contributes significantly to exceedances of the federal ozone standard in California. The meteorology represented in the South Coast Air Quality Management District's five episode discussed by the commenter *is not* consistent with a strong probability that the exceedances during these episodes were due entirely, or even partially, to the presence of ozone-rich air that had descended from the stratosphere. There is significant evidence that anthropogenic emissions of oxides of nitrogen (NOx) and volatile organic compounds (VOC) do contribute significantly to these exceedances. If intrusion of stratospheric ozone were responsible for elevated concentrations in the lower atmosphere, we would find those elevated concentrations in populated and unpopulated areas alike. Instead elevated ozone concentrations are commonly found only in areas having substantial emissions of NOx and VOCs (or in areas impacted by transport from such areas).

2. Comment: Information regarding the types of models and model inputs were not available for review.

Response: The modeling and modeling inputs used by the districts are provided in the individual modeling reports for each area submitted to and approved by U.S. EPA.

3. Comment: The data used to determine the need for ozone precursor controls is questionable because the modeling inputs are not substantiated. Specifically the boundary conditions are not correctly identified.

Response: The SIP was prepared with the best data available. In all modeling studies, observations, both surface and aloft, are used to set boundary conditions, if available. While the lack of data to establish some boundary conditions does introduce uncertainties, established protocols for quantifying and managing these uncertainties have been followed. The higher concentrations of ozone aloft mentioned by the commenter were not measured at the boundaries, but in layers within the modeling region. These layers are the result of surface generated pollutants being trapped aloft from the previous night, as has been documented in several areas of the state.

4. Comment: The chemistry simulated by modeling is not substantiated.

Response: The chemistry simulated by the computer models used is supported by a considerable body of evidence. The nighttime reduction of ozone by reaction with NOx is well understood and has been replicated by the models' chemical mechanism. It is only during the daytime, when solar radiation is available to drive photochemical reactions, that ozone concentrations increase. The models correctly have predicted peak ozone in the South Coast over a ten year period based on observed reductions of NOx and VOCs.

5. Comments: Emissions of NOx provide greater benefits than detriment.

Response: Due to its scavenging effect, reductions of NOx emissions may increase local ozone levels, but they reduce downwind ozone concentrations. When the effects of transport are considered, NOx emissions do not provide an overall benefit. Moreover, NOx emissions play a substantial role in the formation of particulate matter (PM). Studies have shown that PM may be a greater health risk to humans than ozone.

6. Comment: The SIP fails to account for biolgenic VOCs.

Response: The modeling relied on in the SIP does account for biogenic VOCs. The uncertainties in the inventory of biogenic VOCs have been addressed through sensitivity studies, which indicate that biogenic VOCs are not important in predicting current ozone levels in California.

Responses to Issues Raised Regarding Locomotive Regulation

Comment: The AAR proposal is technology-stretching but feasible. The ARB proposal is technologically infeasible because it is based on technologies that are unproven.

Response: Staff agrees that current diesel locomotive technology cannot meet the standards proposed in the SIP. The ARB proposal, like most of our proposals, is technology-forcing. However, staff believes that the reductions requested will be technologically feasible in the timeframe available. New locomotives generally emit 9-10 g/hp-hr NOx. The SIP proposes that this be reduced to 5 g/hp-hr by 2000, and 4 g/hp-hr by 2005, a reduction of about 50 percent for new locomotives. This should be achievable through technology transfer from on-road diesels. The proposed standards recognize that locomotives face a different operating environment than trucks and may not be able to fully utilize all on-road technology. This is why a 4 g/hp-hr standard is proposed for new locomotives in 2005 whereas a 2 g/hp-hr truck standard (a 50 percent reduction) is proposed for 2002, three years earlier. Staff believes that these disparate standards will require comparable levels of technological effort. The staff believes that the reductions for new locomotives are both reasonable and technologically feasible.

Comment: The ARB proposal will subject the national railroad network to demands in California that are inconsistent with the rest of the nation.

Response: The ARB proposal suggests that in addition to the national requirements that will affect rail operations in all air basins, a more stringent fleet average should be met in the SCAB, because of its extreme needs. This fleet average is set at a level equivalent to the new locomotive standards that the ARB is suggesting the U.S. EPA adopt. The fleet average requirement could be met by directing the newer clean locomotives to the SCAB, or by greater reductions than mandated for some locomotives so that less than complete use of new locomotives would be required. The FIP and the AAR proposal both include a fleet average requirement for the SCAB, so the ARB proposal does not differ from other alternatives offered in this respect.

Comment: The proposed requirements will increase rail freight costs and may ultimately lead to higher overall NOx emissions through more truck VMT.

Response: The potential for intermodal shifts (primarily from rail to truck) to result from proposed locomotive regulations was raised by the industry in earlier meetings. The ARB currently has a study nearing completion assessing the potential for a goods movement shift to result from proposed regulations that would affect the goods movement modes. In preliminary analyses, the following aspects are noted: (1) railroads are a more efficient way to move goods over the long haul, resulting in 2-3 times less emissions per ton-mile than trucking; (2) in the absence of locomotive regulations, the proposed on-road truck regulations would reduce that benefit, such that locomotives and rails would be essentially equivalent

means of goods movement from an emissions perspective; and (3) this would potentially cause a shift to the railroads (although the extent is unclear since rail movement takes longer and is perceived as less reliable). The estimated cost-effectiveness of reducing truck emissions is comparable to that for reducing rail emissions. Therefore, the impact on freight rates would not be expected to be substantial, and the staff does not believe that significant modal shift would occur. Further, even if such shifts did occur, the emissions impact would probably not be significant in the long run, since the truck emissions will be reduced in the same timeframe.

Comment: Clean locomotives are less efficient, so the number of locomotives pulling the train will increase.

Response: There is no reason to believe that a clean locomotive would be significantly less efficient. We expect the locomotive standards to be achievable with diesel-powered locomotives. The argument is probably based on an assumption that the standards would require natural gas-powered locomotives. Early experience with liquefied natural gas (LNG) for locomotives required engine derating at notch 8 to avoid detonation problems. However, further technological development has allowed these locomotives to develop full rated horsepower (Department of the Navy, Letter addressed to Ms. Jackie Lourenco, ARB, dated October 6, 1994). These LNG locomotive conversions are EMD 635 engines that develop around 3000 horsepower. The Burlington Northern Railroad is developing similar technology for a 4000 horsepower EMD 710 engine (op cit). This is the locomotive engine model currently being marketed by EMD. Thus, in the long-term, no increase in the number of locomotives even under a LNG scenario is anticipated.

Comment: Standards based on g/bhp-hr will constrain the current trend towards increasing horsepower. Higher horsepower units mean that fewer locomotives are needed to pull the same load, with a resultant reduction in emissions. The standards should instead be expressed in percentage reduction from the baseline.

Response: The emissions data with which staff is familiar do not indicate that emissions are higher on a g/hp-hr basis for high horsepower units than for lower horsepower ones. Why General Electric Transportation Systems (GETS) believes that this would be so is not clear. The same technological requirements should exist, regardless of engine size and horsepower. Staff agrees that the trend towards higher horsepower units is probably positive from an emissions perspective. At least part of the reason that percentage reductions seem more attractive to industry is that the baseline emissions for locomotives are not well established. Different testing facilities currently use different test procedures and different composite duty cycles. It is important that baseline conditions be established, and that compliance rules be enforced in consistent ways. In presenting its net reductions for locomotives, the ARB staff has assumed that the current average locomotive emits about 12 g/hp-hr NOx.

Comment: The intent of the CAA is that the U.S. EPA should set standards based on economic, technical, and other information provided by a variety of parties, including the railroad industry. The ARB is usurping that role by suggesting nationwide standards in the SIP that, if accepted, will define the nationwide standards. The ARB should rely on the U.S. EPA to set standards for new and remanufactured locomotives.

Response: Locomotives are a significant contributor to California's NOx inventory, and are currently not subject to emission controls, other than locally enforced opacity limits. They should do their share towards cleaning up California's air. The ARB recognizes that the 1990 CAA preempted California from adopting and enforcing emission standards for new locomotives. We do retain authority to set operational controls and in-use requirements, however. In suggesting standards for new locomotives, the ARB is merely stating what levels of controls we believe are necessary and feasible for locomotives based on our discussions with the railroad engines, locomotive manufacturers, and other interested parties.

State of California
AIR RESOURCES BOARD

Resolution No. 94-61

November 15, 1994

WHEREAS, the Legislature in Health and Safety Code section 39602 has designated the state Air Resources Board (ARB or Board) the air pollution control agency for all purposes set forth in federal law;

WHEREAS, the ARB is responsible for the preparation of the state implementation plan (SIP) for attaining and maintaining the national ambient air quality standards (NAAQS) as required by the federal Clean Air Act (the Act; 42 U.S.C. section 7401 et seq.), and to this end is directed by Health and Safety Code section 39602 to coordinate the activities of all local and regional air pollution control and air quality management districts ("districts") necessary to comply with the Act;

WHEREAS, section 39602 also provides that the SIP shall include only those provisions necessary to meet the requirements of the Act;

WHEREAS, sections 39515 and 39516 of the Health and Safety Code provide that any duty may be delegated to the Board's Executive Officer as the Board deems appropriate;

WHEREAS, the Act as amended in 1990 requires the State of California to submit to the United States Environmental Protection Agency (U.S. EPA) a revision to the SIP for ozone nonattainment areas designated as "serious," "severe," and "extreme" in accordance with section 181 of the Act by November 15, 1994;

WHEREAS, section 182(e)(2)(A) of the Act requires the revision for these serious and above nonattainment areas to demonstrate attainment of the ozone NAAQS by the applicable attainment date specified in section 181 ("attainment demonstration");

WHEREAS, pursuant to section 181(a) of the Act, the South Coast Air Basin is classified as an extreme ozone nonattainment area with an attainment date of 2010; the Southeast Desert Air Basin is classified as severe-17 with an attainment date of 2007;

WHEREAS, section 182(c)(2)(B) of the Act requires the revision for each serious and above nonattainment area to demonstrate at least a three percent per year average reduction in emissions of volatile organic compounds (VOCs) after 1996, or to demonstrate that a reduction by a lesser amount reflects all measures that can feasibly be implemented in the area ("post-1996 rate of progress demonstration");

WHEREAS, the Act requires an enhanced vehicle inspection and maintenance (I/M) program for all serious, severe, and extreme non-attainment areas;

WHEREAS, sections 172(c)(9), 182(c)(9), and 182(e)(5) of the Act require that SIPs contain contingency measures to be implemented if a nonattainment area fails to make reasonable further progress or fails to attain a NAAQS by the applicable date;

WHEREAS, the U.S. EPA is in the process of imposing a federal implementation plan (FIP) on the South Coast Air Quality Management District (AQMD), due to their failure to meet certain requirements set forth in the Act prior to its amendment in 1990;

WHEREAS, the Act allows SIP measures which meet all applicable requirements to be substituted for FIP measures;

WHEREAS, the districts have primary responsibility for the control of air pollution from nonvehicular sources and for adopting control measures, rules, and regulations to attain the NAAQS within their boundaries pursuant to sections 39002, 40000, 40001, 40460, 40462, 41111, and 41650 of the Health and Safety Code;

WHEREAS, sections 40469 and 41650 of the Health and Safety Code require the ARB to adopt the nonattainment plan approved by a district as part of the SIP unless the Board finds, after a conflict resolution process and public hearing, that the plan does not meet the requirements of the Act;

WHEREAS, the ARB has primary responsibility for the control of air pollution from vehicular sources, including motor vehicle fuels, as specified in sections 39002, 39500, and Part 5 (commencing with section 43000) of the Health and Safety Code, and for ensuring that the districts meet their responsibilities under the Act pursuant to sections 39002, 39500, 39602, 40469, and 41650 of the Health and Safety Code;

WHEREAS, the ARB has been directed by the Legislature to regulate consumer products in order to reduce emissions of VOCs pursuant to section 41712 of the Health and Safety Code;

WHEREAS, the ARB is authorized by Health and Safety Code section 39600 to do such acts as may be necessary for the proper execution of its powers and duties;

WHEREAS, the Board staff has prepared statewide elements for consumer products and mobile sources for inclusion in the 1994 ozone SIP submittal;

WHEREAS, the consumer products element consists of near-term, mid-term, and long-term measures comprising a mix of existing regulations, regulations which will cover additional product categories not subject to the current program, and measures which rely on new technologies along with market incentives and consumer education;

WHEREAS, the mobile source element is comprised of existing control strategies and near-term and long-term state and federal measures which will achieve emission reductions from on- and off-road mobile sources including passenger cars, light-duty trucks, medium-duty vehicles, heavy-duty vehicles, and off-road equipment;

WHEREAS, the Bureau of Automotive Repair (BAR) has prepared and is preparing the SIP element to achieve emission reductions from an enhanced Inspection and Maintenance Program in accordance with Assembly Bill 2018 (Stats. 1994, c. 27), Senate Bill 198 (Stats. 1994, c. 28) and SB 521 (Stats. 1994, c. 29);

WHEREAS, the Department of Pesticide Regulation (DPR) has prepared the SIP element to achieve emission reductions from pesticides;

WHEREAS, the 1994 ozone SIP revisions include the ozone portion of the 1994 AQMP ("plan") prepared by the South Coast AQMD, along with environmental documentation as required by the California Environmental Quality Act (CEQA) and certifications of public notice as required by U.S. EPA;

WHEREAS, the resolution adopting the South Coast plan indicates that while the total emission reductions estimated in the district plan will be achieved, the exact mix of control strategies and the quantity of reductions associated with them may be different than the district estimated for those sources under the sole jurisdiction of the ARB and the U.S. EPA;

WHEREAS, federal law set forth in section 110(l) of the Act and Title 40, Code of Federal Regulations, section 51.102 require that one or more public hearings, preceded by at least 30 days notice and opportunity for public review, must be conducted prior to the adoption and submittal to U.S. EPA of any SIP revision;

WHEREAS, CEQA and Board regulations require that prior to taking any action or engaging in any activity which may have a significant adverse effect on the environment, alternatives and mitigation measures to minimize any significant impact will be described and imposed by the Board where feasible;

WHEREAS, the ARB Staff Report, which summarizes and explains the contents of the proposed SIP revision (including descriptions of both statewide and local regional elements), the requirements applicable to the SIP revision and the environmental impacts of the statewide mobile source and consumer product elements, along with alternatives and mitigation to reduce such impacts, has been available for public review at least 30 days prior to the hearing;

WHEREAS, the Board has conducted a public hearing to consider approval of the ozone portion of the South Coast 1994 AQMP and its submittal to U.S. EPA as a SIP revision;

WHEREAS, in consideration of the Staff Report; the proposed statewide and South Coast SIP elements; the environmental documentation prepared by Board staff and by the district; the written and oral testimony presented by the districts, the public, interested government agencies, and the regulated industry; and the economic assessments prepared by Board staff, the Office of Planning and Research, the Business, Housing and Transportation Agency, and the independent consultant M.Cubed, the Board finds:

1. Healthful air must be achieved through an intensive and coordinated local, state, and federal effort to attain the NAAQS for ozone in the South Coast by 2010 and the Southeast Desert in 2007.

2. While statewide exposure to unhealthful ozone concentrations has been reduced by about 50% since 1980, along with the frequency and severity of ozone pollution episodes, due to California's existing regulations on both vehicular and non-vehicular sources, more must be done.

3. Emission sources under federal jurisdiction are increasingly significant contributors to ozone pollution as emissions from other source categories are reduced through state and local controls.

4. The stringency of the NOx and VOC precursor control strategy necessary for the South Coast to meet the 1994 ozone planning requirements for attainment and rate of progress demonstrations (ROP)are dependent upon the severity of the problem in the district, the mix and location of sources which contribute to ozone precursor concentrations, and the timing and stringency of previously adopted controls.

5. Mobile source controls on new cars, trucks, buses, off-road equipment, and other mobile source categories are a vital element of the attainment equation in the South Coast, without which the area will not be able to meet the attainment deadline specified in the Act.

6. The ARB and the U.S. EPA share responsibility for controlling new mobile sources and both must adopt stringent controls on the sources within their respective jurisdictions.

7. The control of emissions from existing vehicles and engines through an enhanced inspection and maintenance program, old vehicle scrappage, and transportation and land use strategies to reduce vehicle miles travelled is dependent upon both state and local commitments.

8. Stringent permitting rules for new sources and modifications and retrofit controls on several categories of existing sources are a necessary local responsibility.

9. Area sources such as solvents, architectural coatings, adhesives, pesticides, and consumer products contribute an increasing percentage of ozone emissions and must be controlled by state and local agencies.

10. The SIP must be submitted to and approved by the U.S. EPA prior to promulgation of the federal implement plan (FIP) for the South Coast scheduled for early next year in order to replace the FIP and reinstate California's control over its air pollution program.

11. The SIP provides a current assessment of California's ozone situation by using the best available data to describe the emission inventory and its distribution across source categories, fully detailing the ozone problem in each of the affected nonattainment areas, and accurately describing ambient air quality data and trends.

12. The SIP bases its prescription for correcting outstanding ozone problems on state-of-the-art photochemical grid modeling which measures or estimates the region's responsiveness to a variety of emission reductions so that the most cost-effective strategies can be selected.

13. The attainment demonstration for the South Coast presents credible assurance, based upon calculations of the region's pollutant carrying capacity, its 1990 baseline emissions inventory, and the reductions reasonably anticipated from existing and additional measures, that the South Coast will attain the NAAQS for ozone by 2010 and the Southeast Desert by 2007.

14. The new mobile source control measures proposed for adoption and implementation by the ARB within the next 30 months for medium- and heavy-duty vehicles, as well as the additional mid-term measures proposed for later adoption and the long-term measures which rely on the development of advanced technology, will supplement ARB's current stringent standards for vehicles and fuels and are the most ambitious measures which are feasible, supplying a central and imperative strategy to reduce emissions from the most significant single source of ozone precursors in the State.

15. The mid-term and long-term consumer products regulations which will supplement existing regulations will achieve significant VOC reductions statewide; are necessary to ensure that the South Coast and Southeast Desert will meet ozone NAAQS; will lead to the development of programs which will foster innovative technologies for long-term application; and will continue to provide flexibility to the product manufacturers through the use of market incentives.

16. The development of innovative technologies, upon which long-term emission reductions from consumer products are dependent, necessitate increased cooperation from, and coordination with, the U.S. EPA and the encouragement of controls at the national level.

17. Controls on VOC emissions from the agricultural and structural use of economic poisons have been under study and development for several years by the DPR, the ARB, and the districts, and are a feasible, cost-effective, and necessary means of progressing towards attaining the ozone NAAQS statewide.

18. The control measures proposed by DPR should be included in the SIP with an expeditious adoption schedule.

19. The U.S. EPA has a clear and present duty to control several categories of mobile sources on a national level and must rapidly and diligently meet its responsibilities if California is to attain the ozone NAAQS by the dates set forth in the Act.

20. The mobile source control measures identified in the proposed SIP for adoption by U.S. EPA are feasible, cost-effective, socially acceptable, and would provide a larger market base to manufacturers, which would encourage the development of new technology.

21. The state measures are cost-effective in consideration of the substantial air quality improvements and public health benefits which will result from their implementation, and are more cost-effective than their counterparts proposed in the FIP.

22. The ARB is the lead agency for the mobile source and consumer product elements of the SIP, has considered the environmental analysis set forth in Volume II of the Staff Report, and concurs in the discussion of potential impacts.

23. While there may be adverse secondary environmental impacts from the accelerated vehicle retirement program and the electric vehicle program, the effects are speculative and cannot be quantified until the scope of these programs is defined by proposed regulations, or (for electric vehicles) until the regulations are implemented and the state of battery technology is known.

24. As regulations implementing the new mobile source measures are developed, detailed environmental impact analyses, including a discussion of regulatory alternatives and mitigation measures, will be performed in conjunction with the rulemaking process.

25. At this time there are no feasible mitigation measures which the ARB can impose to lessen the potential adverse impacts of the mobile source measures on the environment, and no

less stringent alternatives which will accomplish the goal imposed by federal law with fewer potential environmental impacts.

26. The potential adverse impacts identified for the mobile source measures are vastly outweighed by the substantial air quality benefits, especially the reduction of VOC emissions, which will result from their adoption and implementation.

27. A monitoring program to keep track of the impacts of both currently adopted and proposed mobile source measures should be undertaken by the staff in conjunction with the development and implementation of the measures.

28. Future regulatory activities involved with the consumer products control program are anticipated to entail additional or expanded applications of the existing regulations and the Alternative Control Plan, which were subject to detailed environmental analyses which concluded that no significant adverse environmental impacts would result, and hence no adverse impacts are anticipated.

29. As the SIP measures for consumer products are developed into regulations, potential impacts, alternatives, and mitigation measures will be analyzed in detail, particularly with regard to the possibility of stratospheric ozone depletion, global warming, creation of localized VOC "hot spots," generation of toxic air contaminants, potential increased use due to reduced efficacy, and VOC or toxic loading to water treatment facilities.

30. Mobile source and consumer products regulations which have been adopted and are proposed for inclusion in the SIP have undergone environmental review by the Board at the time of their adoption and no further analysis is required at this time.

31. The South Coast AQMD has adopted and submitted to the ARB for inclusion in the SIP the ozone portion of the district's 1994 AQMP, along with proof of publication and environmental documents, in accordance with state and federal law.

32. The South Coast plan was available for public review and comment for at least 30 days, and a public hearing was conducted prior to adoption of the plan by the district governing board as required by the Act and U.S. EPA regulations.

33. The South Coast plan contains numerous measures to control ozone precursor emissions from a wide variety of stationary sources, and the attainment and post-1996 ROP demonstration consists of both rules which have been adopted as well as legally enforceable commitments to adopt additional rules.

34. The measures contained in the final South Coast plan for stationary, area, and transportation sources are the result of strenuous effort, consensus building, and the need to avoid stifling California's economic recovery, and are reasonable, cost-effective control strategies with expeditious adoption schedules.

35. Reconciliation has been achieved between the ARB and the South Coast AQMD over the assignment of emission reductions to mobile source and other state measures, so that emission inventories and anticipated emission reductions from these sources are consistently and accurately reflected.

36. The South Coast plan accurately reflects the amounts of required VOC and NOx reductions which are anticipated to result from existing regulations, including ARB's low emission vehicle/clean fuel standards and consumer products controls, and the reductions which will result from the adoption and implementation of new local regulations, new ARB regulations, and new federal measures.

37. The South Coast plan sets forth rate-of-progress calculations from 1997 through the attainment year, indicating 3% annual reductions in VOCs averaged over each consecutive three-year period.

38. The final South Coast SIP submittal contains a high percentage of the emissions reductions in the form of adopted measures and is sufficient to satisfy the completeness criteria set forth in the Act and U.S. EPA guidance.

39. The South Coast plan is dependent upon state and federal measures for attainment of the ozone NAAQS, and reflects both a need for these measures and an understanding that jurisdiction for these measures exists in certain instances only with the State of California or the federal government.

40. The contingency measures set forth in the South Coast plan represents the best effort which is possible at this time.

41. The long term measures which are dependent upon the development of advanced control technology as permitted by section 182(e)(5) of the Act are set forth as long-range measures in the South Coast attainment strategy and, together with the state and federal advanced technology measures which will be implemented by 2010, meet the requirements of the Act pertaining to innovative technology.

42. The final South Coast plan provides for attainment based on state and local measures and anticipated national standards for sources under federal jurisdiction, and does not rely on FIP measures.

43. The Antelope Valley (Los Angeles County) and Coachella-San Jacinto Planning Area (Riverside County) are under the jurisdiction of the SCAQMD but in the Southeast Desert Air Basin; they are affected by overwhelming transport from the South Coast Air Basin and must, therefore, rely on the South Coast attainment strategy to demonstrate progress toward attainment and attainment.

44. The final South Coast plan meets all the requirements of the Act and should completely replace the proposed FIP measures upon approval by the U.S. EPA.

45. The ARB is a responsible agency under CEQA for the purpose of reviewing and approving the local element of the SIP, and has considered the environmental documentation provided by the South Coast AQMD with its plan.

WHEREAS, additional responses to significant environmental issues raised in public testimony regarding the state measures is set forth in Attachment A to Resolution 94-60, which is incorporated by reference herein.

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby approves the ozone portion of the 1994 AQMP adopted by the South Coast AQMD and submitted in final form to the ARB for inclusion in the SIP, and directs the Executive Officer to submit the plan, together with the appropriate supporting documentation, to the U.S. EPA for approval, and to work with the U.S. EPA to resolve any issues regarding plan completeness and approvability that may arise.

BE IT FURTHER RESOLVED, that the Board concurs that a waiver from the post-1996 ROP requirements for the Southeast Desert is appropriate and directs the Executive Officer to submit a formal, legally sufficient waiver request to the U.S. EPA forthwith.

BE IT FURTHER RESOLVED, that the Board certifies pursuant to 40 C.F.R. section 51.102 that the South Coast plan being submitted as the 1994 ozone attainment and ROP demonstration SIP revision was adopted after notice and public hearing as required by 40 C.F.R. section 51.102 and directs the Executive Officer to submit the appropriate supporting documentation to U.S. EPA along with the SIP submittal.

BE IT FURTHER RESOLVED, that the Board intends the SIP submittal for the South Coast to serve as a complete substitute to the proposed FIP and directs the Executive Officer to request immediate action by the U.S. EPA to approve the SIP submittal in its entirety as a replacement for the FIP prior to February 15, 1995.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to convey to U.S. EPA the Board's emphatic assertion that it is necessary for U.S. EPA immediately to begin to

develop and adopt those measures for the sources under federal jurisdiction which the ARB has identified as being the responsibility of the U.S. EPA to control, and to continue to meet and confer with the U.S. EPA and other interested persons, including the district, industry, and the public, until the necessary federal measures are proposed, adopted, and implemented.

I hereby certify that the above is a true and correct copy of Resolution 94-61 as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

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State of California
AIR RESOURCES BOARD

Resolution No. 94-62

November 15, 1994

WHEREAS, the Legislature in Health and Safety Code section 39602 has designated the state Air Resources Board (ARB or Board) the air pollution control agency for all purposes set forth in federal law;

WHEREAS, the ARB is responsible for the preparation of the state implementation plan (SIP) for attaining and maintaining the national ambient air quality standards (NAAQS) as required by the federal Clean Air Act (the Act; 42 U.S.C. section 7401 et seq.), and to this end is directed by Health and Safety Code section 39602 to coordinate the activities of all local and regional air pollution control and air quality management districts ("districts") necessary to comply with the Act;

WHEREAS, section 39602 also provides that the SIP shall include only those provisions necessary to meet the requirements of the Act;

WHEREAS, sections 39515 and 39516 of the Health and Safety Code provide that any duty may be delegated to the Board's Executive Officer as the Board deems appropriate;

WHEREAS, the Act as amended in 1990 requires the State of California to submit to the United States Environmental Protection Agency (U.S. EPA) a revision to the SIP for ozone nonattainment areas designated as "serious," "severe," and "extreme" in accordance with section 181 of the Act by November 15, 1994;

WHEREAS, section 182(e)(2)(A) of the Act requires the revision for these serious and above nonattainment areas to demonstrate attainment of the national ozone standard by the applicable attainment date specified in section 181 ("attainment demonstration");

WHEREAS, pursuant to section 181(a) of the Act, Ventura County is classified as a severe ozone nonattainment area with an attainment date of 2005;

WHEREAS, section 182(c)(2)(B) of the Act requires the revision for each serious and above nonattainment area to demonstrate at least a three percent per year average reduction in emissions of volatile organic compounds (VOCs) after 1996, or to demonstrate that a reduction by a lesser amount reflects all measures that can feasibly be implemented in the area ("post-1996 rate of progress demonstration");

WHEREAS, the Act requires an enhanced vehicle inspection and maintenance (I/M) program for all serious, severe, and extreme non-attainment areas;

WHEREAS, sections 172(c)(9), 182(c)(9), and 182(e)(5) of the Act require that SIPs contain contingency measures to be implemented if a nonattainment area fails to make reasonable further progress or fails to attain a NAAQS by the applicable date;

WHEREAS, the U.S. EPA is in the process of imposing a federal implementation plan (FIP) on the Ventura County Air Pollution Control District (APCD), due to the district's failure to meet certain requirements set forth in the Act prior to its amendment in 1990;

WHEREAS, the Act allows SIP measures which meet all applicable requirements to be substituted for FIP measures;

WHEREAS, the districts have primary responsibility for the control of air pollution from nonvehicular sources and for adopting control measures, rules, and regulations to attain the NAAQS within their boundaries pursuant to sections 39002, 40000, 40001 and 41650 of the Health and Safety Code;

WHEREAS, section 41650 of the Health and Safety Code requires the ARB to adopt the nonattainment plan approved by a district as part of the SIP unless the Board finds, after a public hearing, that the plan does not meet the requirements of the Act;

WHEREAS, the ARB has primary responsibility for the control of air pollution from vehicular sources, including motor vehicle fuels, as specified in sections 39002, 39500, and Part 5 (commencing with section 43000) of the Health and Safety Code, and for ensuring that the districts meet their responsibilities under the Act pursuant to sections 39002, 39500, 39602 and 41650 of the Health and Safety Code;

WHEREAS, the ARB has been directed by the Legislature to regulate consumer products in order to reduce emissions of VOCs pursuant to section 41712 of the Health and Safety Code;

WHEREAS, the ARB is authorized by Health and Safety Code section 39600 to do such acts as may be necessary for the proper execution of its powers and duties;

WHEREAS, the Board staff has prepared statewide elements for consumer products and mobile sources for inclusion in the 1994 ozone SIP submittal;

WHEREAS, the consumer products element consists of near-term, mid-term, and long-term measures comprising a mix of existing regulations, regulations which will cover additional product categories not subject to the current program, and measures which rely on new technologies along with market incentives and consumer education;

WHEREAS, the mobile source element is comprised of existing control strategies and near-term and long-term state and federal measures which will achieve emission reductions from on- and off-road mobile sources including passenger cars, light-duty trucks, medium-duty vehicles, heavy-duty vehicles, and off-road equipment;

WHEREAS, the Bureau of Automotive Repairs (BAR) has prepared and is preparing a SIP element to achieve emission reductions from an enhanced Inspection and Maintenance Program in accordance with Assembly Bill 2018 (Stats. 1994, c. 27), Senate Bill 198 (Stats. 1994, c. 28) and SB 521 (Stats. 1994, c. 29);

WHEREAS, the Department of Pesticide Regulation (DPR) has prepared a SIP element to achieve emission reductions from pesticides;

WHEREAS, the 1994 ozone SIP revisions include the nonattainment plan prepared by the Ventura County APCD ("plan"), along with environmental documentation as required by the California Environmental Quality Act (CEQA) and certifications of public notice as required by U.S. EPA;

WHEREAS, the resolution adopting the Ventura County plan indicates that while the total emission reductions estimated in the plan will be achieved, the exact mix of control strategies and the quantity of reductions associated with them may be different than the district estimated for those sources under the sole jurisdiction of the ARB and the U.S. EPA;

WHEREAS, federal law set forth in section 110(l) of the Act and Title 40, Code of Federal Regulations, section 51.102 require that one or more public hearings, preceded by at least 30 days notice and opportunity for public review, must be conducted prior to the adoption and submittal to U.S. EPA of any SIP revision;

WHEREAS, CEQA and Board regulations require that prior to taking any action or engaging in any activity which may have a significant adverse effect on the environment, alternatives and mitigation measures to minimize any significant impact will be described and imposed by the Board where feasible;

WHEREAS, the ARB Staff Report which summarizes and explains the contents of the proposed SIP revision (including descriptions of both statewide and local regional elements), the requirements applicable to the SIP revision and the environmental impacts of the statewide mobile source and consumer product elements, along with alternatives and mitigation to reduce such impacts, has been available for public review at least 30 days prior to the hearing;

WHEREAS, the Board has conducted a public hearing to consider approval of the Ventura County plan and its submittal to U.S. EPA as a SIP revision;

WHEREAS, in consideration of the Staff Report; the proposed statewide and Ventura County SIP elements; the environmental documentation prepared by Board staff and by the district; the written and oral testimony presented by the districts, the public, interested government agencies, and the regulated industry; and the economic assessments prepared by Board staff, the Office of Planning and Research, the Business, Housing and Transportation Agency, and the independent consultant M.Cubed, the Board finds:

1. Healthful air must be achieved through an intensive and coordinated local, state, and federal effort to attain the NAAQS for ozone in Ventura County by 2005.

2. While statewide exposure to unhealthful ozone concentrations has been reduced by about 50% since 1980, along with the frequency and severity of ozone pollution episodes, due to California's existing regulations on both vehicular and non-vehicular sources, more must be done.

3. Emission sources under federal jurisdiction are increasingly significant contributors to ozone pollution as emissions from other source categories are reduced through state and local controls.

4. The stringency of the NOx and VOC precursor control strategy necessary for Ventura County to meet the 1994 ozone planning requirements for attainment and rate of progress (ROP) demonstrations are dependent upon the severity of the problem in the district, the mix and location of sources which contribute to ozone precursor concentrations, and the timing and stringency of previously adopted controls.

5. Mobile source controls on new cars, trucks, buses, off-road equipment, and other mobile source categories are a vital element of the attainment equation in Ventura County, without which the area will not be able to meet the attainment deadline specified in the Act.

6. The ARB and the U.S. EPA share responsibility for controlling new mobile sources and both must adopt stringent controls on the sources within their respective jurisdictions.

7. The control of emissions from existing vehicles and engines through an enhanced inspection and maintenance program, old vehicle scrappage, and transportation and land use strategies to reduce vehicle miles travelled is dependent upon both state and local commitments.

8. Stringent permitting rules for new sources and modifications and retrofit controls on several categories of existing sources are a necessary local responsibility.

9. Area sources such as solvents, architectural coatings, adhesives, pesticides and consumer products contribute an increasing percentage of ozone emissions and must be controlled by state and local agencies.

10. The SIP must be submitted to and approved by the U.S. EPA prior to promulgation of the federal implementation plan (FIP) for Ventura County scheduled for early next year in order to replace the FIP and reinstate California's control over its air pollution program.

11. The SIP provides a current assessment of California's ozone situation by using the best available data to describe the emission inventory and its distribution across source categories, fully detailing the ozone problem in each of the affected nonattainment areas, and accurately describing ambient air quality data and trends.

12. The SIP bases its prescription for correcting outstanding ozone problems on state-of-the-art photochemical grid modeling which measures or estimates the region's responsiveness to a variety of emission reductions so that the most cost-effective strategies can be selected.

13. The attainment demonstration for Ventura County presents credible assurance, based upon calculations of the region's pollutant carrying capacity, its 1990 baseline emissions inventory, and the reductions reasonably anticipated from existing and additional measures, that Ventura County will attain the NAAQS for ozone by 2005.

14. The new mobile source control measures proposed for adoption and implementation by the ARB within the next 30 months for medium- and heavy-duty vehicles, as well as the additional mid-term measures proposed for later adoption and the long-term measures which rely on the development of advanced technology, will supplement ARB's current stringent standards for vehicles and fuels and are the most ambitious measures which are feasible, supplying a central and imperative strategy to reduce emissions from the most significant single source of ozone precursors in the State.

15. The mid-term and long-term consumer products regulations which will supplement existing regulations will achieve significant VOC reductions statewide; will lead to the development of programs which will foster innovative technologies for long-term application; and will continue to provide flexibility to the product manufacturers through the use of market incentives.

16. The development of innovative technologies, upon which long-term emission reductions from consumer products are dependent, necessitate increased cooperation from, and coordination with, the U.S. EPA and the encouragement of controls at the national level.

17. Controls on VOC emissions from the agricultural and structural use of economic poisons have been under study and development for several years by the DPR, the ARB, and the districts, and are a feasible, cost-effective, and necessary means of progressing towards attaining the ozone NAAQS statewide.

18. The control measures proposed by DPR should be included in the SIP with an expeditious adoption schedule.

19. The U.S. EPA has a clear and present duty to control several categories of mobile sources on a national level and must rapidly and diligently meet its responsibilities if California is to attain the ozone NAAQS by the dates set forth in the Act.

20. The mobile source control measures identified in the proposed SIP for adoption by U.S. EPA are feasible, cost-effective, socially acceptable, and would provide a larger market base to manufacturers, which would encourage the development of new technology.

21. The state measures are cost-effective in consideration of the substantial air quality improvements and public health benefits which will result from their implementation, and are more cost-effective than their counterparts proposed in the FIP.

22. The ARB is the lead agency for the mobile source and consumer product elements of the SIP, has considered the environmental analysis set forth in Volume II of the Staff Report, and concurs in the discussion of potential impacts.

23. While there may be adverse secondary environmental impacts from the accelerated vehicle retirement program and the electric vehicle program, the effects are speculative and cannot be quantified until the scope of these programs is defined by proposed regulations, or (for electric vehicles) until the regulations are implemented and the state of battery technology is known.

24. As regulations implementing the new mobile source measures are developed, detailed environmental impact analyses, including a discussion of regulatory alternatives and mitigation measures, will be performed in conjunction with the rulemaking process.

25. At this time there are no feasible mitigation measures which the ARB can impose to lessen the potential adverse impacts of the mobile source measures on the environment, and no less stringent alternatives which will accomplish the goal imposed by federal law with fewer potential environmental impacts.

26. The potential adverse impacts identified for the mobile source measures are vastly outweighed by the substantial air quality benefits, especially the reduction of VOC emissions, which will result from their adoption and implementation.

27. A monitoring program to keep track of the impacts of both currently adopted and proposed mobile source measures should be undertaken by the staff in conjunction with the development and implementation of the measures.

28. Future regulatory activities involved with the consumer products control program are anticipated to entail additional or expanded applications of the existing regulations and the Alternative Control Plan, which were subject to detailed environmental analyses which concluded that no significant adverse environmental impacts would result, and hence no adverse impacts are anticipated.

29. As the SIP measures for consumer products are developed into regulations, potential impacts, alternatives, and mitigation measures will be analyzed in detail, particularly with regard to the possibility of stratospheric ozone depletion, global warming, creation of localized VOC "hot spots," generation of toxic air contaminants, potential increased use due to reduced efficacy, and VOC or toxic loading to water treatment facilities.

30. Mobile source and consumer products regulations which have been adopted and are proposed for inclusion in the SIP have undergone environmental review by the Board at the time of their adoption and no further analysis is required at this time.

31. The Ventura County APCD has adopted and submitted to the ARB for inclusion in the SIP the district's nonattainment plan, along with proof of publication and environmental documents, in accordance with state and federal law.

32. The proposed Ventura County plan was available for public review and comment for at least 30 days and a public hearing was conducted prior to adoption of the plan by the district governing board, as required by the Act and U.S. EPA regulations.

33. The Ventura County plan contains numerous measures to control ozone precursor emissions from a wide variety of stationary sources; the attainment demonstration consists of both rules which have been adopted as well as legally enforceable commitments to adopt additional rules, while the post-1996 ROP demonstration consists solely of adopted rules and regulations.

34. The measures contained in the final Ventura County plan for stationary, area, and transportation sources are the result of strenuous effort, consensus building, and the need

to avoid stifling California's economic recovery, and are reasonable, cost-effective control strategies with expeditious adoption schedules.

35. Reconciliation has been achieved between the ARB and the district regarding mobile source control measures and emission reductions and other state measures, so that emission inventories and anticipated emission reductions from these sources are consistently and accurately reflected in the district plan.

36. The Ventura County plan accurately reflects the amounts of required VOC and NOx reductions which are anticipated to result from existing regulations, including ARB's low emission vehicle/clean fuel standards and consumer products controls, and the reductions which will result from the adoption and implementation of new local regulations, new ARB regulations, and new federal measures.

37. The Ventura County plan sets forth rate-of-progress calculations from 1997 through the attainment year, indicating 3% annual reductions in VOCs averaged over three-year periods and corrected the initial ROP plans, which provided a 15% VOC reduction from 1990-1996, as submitted in November 1993.

38. The final Ventura County SIP submittal contains a high percentage of the emissions reductions in the form of adopted measures and is sufficient to satisfy the completeness criterion set forth in the Act and U.S. EPA guidance.

39. The Ventura County plan is dependent upon state and federal measures for attainment of the ozone NAAQS, and reflects the need for these measures and an understanding that jurisdiction for these measures exists in certain instances only with the State of California or the federal government.

40. The contingency measures set forth in the Ventura County plan represents the best effort which is possible at this time.

41. The Ventura County plan provides for attainment based on state and local measures and anticipated national standards for sources under federal jurisdiction including movement of the shipping channel, and does not rely on FIP measures.

42. The final Ventura County plan assumes promulgation of the FIP, but to the extent the state mobile source, pesticide, and I/M program together with federal action to move the shipping channel will supply all of the reductions attributed to the FIP, an attainment and ROP demonstration can be made without any FIP measures, and the plan should completely replace the proposed FIP measures upon approval by the U.S. EPA.

43. The ARB is a responsible agency under CEQA for the purpose of reviewing and approving the local element of the SIP, and has considered the environmental documentation provided by the Ventura County APCD with its plan.

WHEREAS, additional responses to significant environmental issues raised in public testimony regarding the state measures are set forth in Attachment A to Resolution 94-60, which is incorporated by reference herein.

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby approves the plan adopted by the Ventura County APCD and submitted in final form to the ARB for inclusion in the SIP, and directs the Executive Officer to submit the plan, together with the appropriate supporting documentation, to the U.S. EPA for approval, and to work with the U.S. EPA and take necessary action to resolve any issues regarding plan completeness and approvability that may arise.

BE IT FURTHER RESOLVED, that the Board certifies pursuant to 40 C.F.R. section 51.102 that the Ventura County plan being submitted as the 1994 ozone attainment and ROP demonstration SIP revisions for the district was adopted after notice and public hearing by the district as required by 40 C.F.R. section 51.102 and directs the Executive Officer to submit the appropriate supporting documentation to U.S. EPA along with the SIP submittal.

BE IT FURTHER RESOLVED, that the Board intends the SIP submittal for Ventura County as a substitute for the proposed FIP for the district and directs the Executive Officer to request immediate action by the U.S. EPA to approve the SIP submittal in its entirety as a replacement for the FIP prior to February 15, 1995.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to convey to U.S. EPA the Board's emphatic assertion that it is necessary for U.S. EPA immediately to begin to develop and adopt those measures for the sources under federal jurisdiction which the ARB has identified as being the responsibility of the U.S. EPA to control, and to continue to meet and confer with the U.S. EPA and other interested persons, including the district, industry, and the public, until the necessary federal measures are proposed, adopted, and implemented.

I hereby certify that the above is a true and correct copy of Resolution 94-62 as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

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State of California
AIR RESOURCES BOARD

Resolution No. 94-63

November 15, 1994

WHEREAS, the Legislature in Health and Safety Code section 39602 has designated the state Air Resources Board (ARB or Board) the air pollution control agency for all purposes set forth in federal law;

WHEREAS, the ARB is responsible for the preparation of the state implementation plan (SIP) for attaining and maintaining the national ambient air quality standards (NAAQS) as required by the federal Clean Air Act (the Act; 42 U.S.C. section 7401 et seq.), and to this end is directed by Health and Safety Code section 39602 to coordinate the activities of all local and regional air pollution control and air quality management districts ("districts") necessary to comply with the Act;

WHEREAS, section 39602 also provides that the SIP shall include only those provisions necessary to meet the requirements of the Act;

WHEREAS, sections 39515 and 39516 of the Health and Safety Code provide that any duty may be delegated to the Board's Executive Officer as the Board deems appropriate;

WHEREAS, the Act as amended in 1990 requires the State of California to submit to the United States Environmental Protection Agency (U.S. EPA) a revision to the SIP for ozone nonattainment areas designated as "serious," "severe," and "extreme" in accordance with section 181 of the Act by November 15, 1994;

WHEREAS, section 182(e)(2)(A) of the Act requires the revision for these serious and above nonattainment areas to demonstrate attainment of the ozone NAAQS by the applicable attainment date specified in section 181 ("attainment demonstration");

WHEREAS, pursuant to section 181(a) of the Act, San Diego is classified as a "serious" ozone nonattainment area with an attainment date of 1999;

WHEREAS, section 182(c)(2)(B) of the Act requires the revision for each serious and above nonattainment area to demonstrate at least a three percent per year average reduction in emissions of volatile organic compounds (VOCs) after 1996, or to demonstrate that a reduction by a lesser amount reflects all measures that can feasibly be implemented in the area ("post-1996 rate of progress demonstration");

WHEREAS, the Act requires an enhanced vehicle inspection and maintenance (I/M) program for all serious, severe, and extreme non-attainment areas;

WHEREAS, sections 172(c)(9), 182(c)(9), and 182(e)(5) of the Act require that SIPs contain contingency measures to be implemented if a nonattainment area fails to make reasonable further progress or fails to attain a NAAQS by the applicable date;

WHEREAS, local and regional air pollution control and air quality management districts have primary responsibility for the control of air pollution from nonvehicular sources and for adopting control measures, rules, and regulations to attain the NAAQS within their boundaries pursuant to sections 39002, 40000, 40001 and 41650 of the Health and Safety Code;

WHEREAS, section 41650 of the Health and Safety Code requires the ARB to adopt the nonattainment plan approved by a district as part of the SIP unless the Board finds, after a public hearing, that the plan does not meet the requirements of the Act;

WHEREAS, the ARB has primary responsibility for the control of air pollution from vehicular sources, including motor vehicle fuels, as specified in sections 39002, 39500, and Part 5 (commencing with section 43000) of the Health and Safety Code, and for ensuring that the districts meet their responsibilities under the Act pursuant to sections 39002, 39500, 39602 and 41650 of the Health and Safety Code;

WHEREAS, the ARB has been directed by the Legislature to regulate consumer products in order to reduce emissions of VOCs pursuant to section 41712 of the Health and Safety Code;

WHEREAS, the ARB is authorized by Health and Safety Code section 39600 to do such acts as may be necessary for the proper execution of its powers and duties;

WHEREAS, the Board staff has prepared statewide elements for consumer products and mobile sources for inclusion in the 1994 ozone SIP submittal;

WHEREAS, the 1994 ozone SIP revisions includes the nonattainment plan ("plan") prepared by the San Diego Air Pollution Control District (APCD), along with environmental documentation as required by the California Environmental Quality Act (CEQA) and certifications of public notice as required by U.S. EPA;

WHEREAS, federal law set forth in section 110(l) of the Act and Title 40, Code of Federal Regulations, section 51.102 require that one or more public hearings, preceded by at least 30 days notice and opportunity for public review, must be conducted prior to the adoption and submittal to U.S. EPA of any SIP revision;

WHEREAS, CEQA and Board regulations require that prior to taking any action or engaging in any activity which may have a significant adverse effect on the environment, alternatives and

mitigation measures to minimize any significant impact will be described and imposed by the Board where feasible;

WHEREAS, the ARB Staff Report which summarizes and explains the contents of the proposed SIP revision (including descriptions of both statewide and local regional elements), the requirements applicable to the SIP revision and the environmental impacts of the statewide mobile source and consumer product elements, along with alternatives and mitigation to reduce such impacts, has been available for public review at least 30 days prior to the hearing;

WHEREAS, the Board has conducted a public hearing to consider approval of the San Diego plan and its submittal to U.S. EPA as a SIP revision;

WHEREAS, in consideration of the Staff Report; the proposed statewide and San Diego elements; the environmental documentation prepared by Board staff and by the district; the written and oral testimony presented by the districts, the public, interested government agencies, and the regulated industry; and the economic assessments prepared by Board staff, the Office of Planning and Research, the Business, Housing and Transportation Agency, and the independent consultant M.Cubed, the Board finds:

1. Healthful air must be achieved through an intensive and coordinated local, state, and federal effort to attain the NAAQS for ozone in San Diego by 1999.

2. While statewide exposure to unhealthful ozone concentrations has been reduced by about 50% since 1980, along with the frequency and severity of ozone pollution episodes, due to California's existing regulations on both vehicular and non-vehicular sources, more must be done.

3. The stringency of the NOx and VOC precursor control strategy necessary for San Diego to meet the 1994 ozone planning requirements for attainment and rate of progress demonstrations are dependent upon the severity of the problem in the district, the mix and location of sources which contribute to ozone precursor concentrations, and the timing and stringency of previously adopted controls.

4. Implementation of existing mobile source controls on new cars, trucks, buses, off-road equipment, and other mobile source categories is necessary if San Diego is to meet the 1999 attainment deadline specified in the Act.

5. The ARB and the U.S. EPA share responsibility for controlling new mobile sources and both must adopt and enforce stringent controls on the sources within their respective jurisdictions.

6. Existing controls for area sources such as solvents, architectural coatings, adhesives, pesticides and consumer products must be implemented if San Diego is to attain the ozone NAAQS by 1999.

7. The San Diego submittal includes modifications to previous plan submissions, including revisions to the 1993 rate of progress (ROP) plan, which should be forwarded with the 1994 ozone attainment and post-1996 ROP plans to be submitted to U.S. EPA by November 15.

8. The SIP provides a current assessment of California's ozone situation by using the best available data to describe the emission inventory and its distribution across source categories, fully detailing the ozone problem in each of the affected nonattainment areas, and accurately describing ambient air quality data and trends.

9. The SIP bases its prescription for correcting outstanding ozone problems on state-of-the-art photochemical grid modeling which measures or estimates the region's responsiveness to a variety of emission reductions so that the most cost-effective strategies can be selected.

10. The attainment demonstration for San Diego presents credible assurance, based upon calculations of the region's pollutant carrying capacity, its 1990 baseline emissions inventory, and the reductions reasonably anticipated from enforcement of existing measures, that the area will attain the NAAQS for ozone by 1999.

11. Mobile source and consumer products regulations which have been adopted and are proposed for inclusion in the SIP have undergone environmental review by the Board at the time of their adoption, implementation of which shall be subject to a monitoring by staff, and no further analysis is required at this time.

12. The San Diego APCD has submitted an adopted plan to the ARB for inclusion in the SIP along with proof of publication and environmental documents, in accordance with state and federal law.

13. The draft San Diego plan was available for public review and comment for at least 30 days as required by the Act and U.S. EPA regulations, and a public hearing was conducted, prior to adoption of the plan by the district governing board.

14. The San Diego plan relies on continued enforcement of existing local, state and federal regulations to control ozone precursor emissions from a wide variety of sources.

15. The measures contained in the San Diego plan for stationary, area, and transportation sources are the result of strenuous effort, consensus building, and the need to avoid stifling economic recovery, and are reasonable, cost-effective control strategies with expeditious adoption schedules.

16. The San Diego plan accurately reflects the amounts of required VOC and NOx reductions which are anticipated to result from existing local, state and federal regulations, including ARB's low emission vehicle/clean fuel standards and consumer products controls.

17. The San Diego plan sets forth rate-of-progress calculations from 1997 through the attainment year, indicating 3% annual reductions in VOCs averaged over three-year periods and corrected the initial ROP plans, which provided a 15% VOC reduction from 1990-1996, as submitted in November 1993.

18. All of the emissions reductions in the adopted San Diego plan are in the form of adopted measures, satisfying the completeness criterion set forth in the Act and U.S. EPA guidance.

19. The San Diego plan is dependent upon existing state and federal measures for attainment of the ozone NAAQS, and reflects both a need for these measures and an understanding that jurisdiction for these measures exists in certain instances only with the State of California or the federal government.

20. The contingency measures set forth in the San Diego plan represents the best effort which is possible at this time

21. The final San Diego plan adequately addresses the Act's requirements for serious areas based on its recent reclassification by U.S. EPA from "severe" to "serious."

22. The ARB is a responsible agency under CEQA for the purpose of reviewing and approving the local element of the SIP, and has considered the environmental documentation provided by the San Diego County APCD with its plan.

WHEREAS, additional responses to significant environmental issues raised in public testimony regarding the state measures are set forth in Attachment A to Resolution 94-60, which is incorporated by reference herein.

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby approves the plan adopted by the San Diego County APCD and submitted in final form to the ARB for inclusion in the SIP, and directs the Executive Officer to submit the plan to the U.S. EPA for approval and to work with

the U.S. EPA and take necessary action to resolve any issues regarding plan completeness and approvability that may arise.

BE IT FURTHER RESOLVED, that the Board certifies pursuant to 40 C.F.R. section 51.102 that the San Diego plan being submitted as the 1994 ozone attainment and ROP demonstration SIP revision for the district was adopted after notice and public hearing by the district as required by 40 C.F.R. section 51.102 and directs the Executive Officer to submit the appropriate supporting documentation to U.S. EPA along with the SIP submittal.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to convey to U.S. EPA the Board's emphatic assertion that it is necessary for U.S. EPA immediately to begin to develop and adopt those measures for the sources under federal jurisdiction which the ARB has identified as being the responsibility of the U.S. EPA to control, and to continue to meet and confer with the U.S. EPA and other interested persons, including the district, industry, and the public, until the necessary federal measures are proposed, adopted, and implemented.

I hereby certify that the above is a true and correct copy of Resolution 94-63 as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

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State of California
AIR RESOURCES BOARD

Resolution No. 94-64

November 15, 1994

WHEREAS, the Legislature in Health and Safety Code section 39602 has designated the state Air Resources Board (ARB or Board) the air pollution control agency for all purposes set forth in federal law;

WHEREAS, the ARB is responsible for the preparation of the state implementation plan (SIP) for attaining and maintaining the national ambient air quality standards (NAAQS) as required by the federal Clean Air Act (the Act; 42 U.S.C. section 7401 et seq.), and to this end is directed by Health and Safety Code section 39602 to coordinate the activities of all local and regional air pollution control and air quality management districts ("districts") necessary to comply with the Act;

WHEREAS, section 39602 also provides that the SIP shall include only those provisions necessary to meet the requirements of the Act;

WHEREAS, sections 39515 and 39516 of the Health and Safety Code provide that any duty may be delegated to the Board's Executive Officer as the Board deems appropriate;

WHEREAS, the Act as amended in 1990 requires the State of California to submit to the United States Environmental Protection Agency (U.S. EPA) a revision to the SIP for ozone nonattainment areas designated as "serious," "severe," and "extreme" in accordance with section 181 of the Act by November 15, 1994;

WHEREAS, section 182(e)(2)(A) of the Act requires the revision for these serious and above nonattainment areas to demonstrate attainment of the national ozone standard by the applicable attainment date specified in section 181 ("attainment demonstration");

WHEREAS, pursuant to section 181(a) of the Act, the Mojave Desert portion of the Southeast Desert Modified Air Quality Maintenance Area (SDMAQMA) is classified as a "severe-17" nonattainment area with an attainment date of 2007;

WHEREAS, section 182(c)(2)(B) of the Act requires the revision for each serious and above nonattainment area to demonstrate at least a three percent per year average reduction in emissions of volatile organic compounds (VOCs) after 1996, or to demonstrate that a reduction by a lesser amount reflects all measures that can feasibly be implemented in the area ("post-1996 rate of progress demonstration");

WHEREAS, sections 172(c)(9), 182(c)(9), and 182(e)(5) of the Act require that SIPs contain contingency measures to be implemented if a nonattainment area fails to make reasonable further progress or fails to attain a NAAQS by the applicable date;

WHEREAS, the districts have primary responsibility for the control of air pollution from nonvehicular sources and for adopting control measures, rules, and regulations to attain the NAAQS within their boundaries pursuant to sections 39002, 40000, 40001 and 41650 of the Health and Safety Code;

WHEREAS, section 41650 of the Health and Safety Code require the ARB to adopt the nonattainment plan approved by a district as part of the SIP unless the Board finds, after a public hearing, that the plan does not meet the requirements of the Act;

WHEREAS, the ARB has primary responsibility for the control of air pollution from vehicular sources, including motor vehicle fuels, as specified in sections 39002, 39500, and Part 5 (commencing with section 43000) of the Health and Safety Code, and for ensuring that the districts meet their responsibilities under the Act pursuant to sections 39002, 39500, 39602 and 41650 of the Health and Safety Code;

WHEREAS, the ARB has been directed by the Legislature to regulate consumer products in order to reduce emissions of VOCs pursuant to section 41712 of the Health and Safety Code;

WHEREAS, the ARB is authorized by Health and Safety Code section 39600 to do such acts as may be necessary for the proper execution of its powers and duties;

WHEREAS, the Board staff has prepared statewide SIP elements for consumer products and mobile sources for inclusion in the 1994 ozone SIP submittal;

WHEREAS, the consumer products element consists of near-term, mid-term, and long-term measures comprising a mix of existing regulations, regulations which will cover additional product categories not subject to the current program, and measures which rely on new technologies along with market incentives and consumer education;

WHEREAS, the mobile source element is comprised of existing control strategies and near-term and long-term state and federal measures which will achieve emission reductions from on- and off-road mobile sources including passenger cars, light-duty trucks, medium-duty vehicles, heavy-duty vehicles, and off-road equipment;

WHEREAS, the Bureau of Automotive Repair (BAR) has prepared and is preparing a SIP element to achieve emission reductions from an enhanced Inspection and Maintenance Program in

accordance with Assembly Bill 2018 (Stats. 1994, c. 27), Senate Bill 198 (Stats. 1994, c. 28) and SB 521 (Stats. 1994, c. 29);

WHEREAS, the Department of Pesticide Regulation (DPR) has prepared a SIP element to achieve emission reductions from pesticides;

WHEREAS, the 1994 ozone SIP revisions include the nonattainment plan ("plan") prepared by the Mojave Desert Air Quality Management District (AQMD), along with environmental documentation as required by the California Environmental Quality Act (CEQA) and certifications of public notice as required by U.S. EPA;

WHEREAS, the resolution adopting the Mojave Desert plan indicates that while the total emission reductions estimated in each plan will be achieved, the exact mix of control strategies and the quantity of reductions associated with them may be different than the district estimated for those sources under the sole jurisdiction of the ARB and the U.S. EPA;

WHEREAS, federal law set forth in section 110(l) of the Act and Title 40, Code of Federal Regulations, section 51.102 require that one or more public hearings, preceded by at least 30 days notice and opportunity for public review, must be conducted prior to the adoption and submittal to U.S. EPA of any SIP revision;

WHEREAS, CEQA and Board regulations require that prior to taking any action or engaging in any activity which may have a significant adverse effect on the environment, alternatives and mitigation measures to minimize any significant impact will be described and imposed by the Board where feasible;

WHEREAS, the ARB Staff Report, which summarizes and explains the contents of the proposed SIP revision (including descriptions of both statewide and local regional elements), the requirements applicable to the SIP revision and the environmental impacts of the statewide mobile source and consumer product elements, along with alternatives and mitigation to reduce such impacts, has been available for public review at least 30 days prior to the hearing;

WHEREAS, the Board has conducted a public hearing to consider approval of the Mojave Desert plan and its submittal to U.S. EPA as a SIP revision;

WHEREAS, in consideration of the Staff Report; the proposed statewide and Mojave Desert SIP elements; the environmental documentation prepared by Board staff and by the district; the written and oral testimony presented by the districts, the public, interested government agencies, and the regulated industry; and the economic assessments prepared by Board staff, the Office of Planning and Research, the Business, Housing and Transportation Agency, and the independent consultant M.Cubed, the Board finds:

1. Healthful air must be achieved through an intensive and coordinated local, state, and federal effort to attain the NAAQS for ozone in the Mojave Desert by 2007.

2. While statewide exposure to unhealthful ozone concentrations has been reduced by about 50% since 1980, along with the frequency and severity of ozone pollution episodes, due to California's existing regulations on both vehicular and non-vehicular sources, more must be done.

3. Emission sources under federal jurisdiction are increasingly significant contributors to ozone pollution as emissions from other source categories are reduced through state and local controls.

4. The Mojave Desert's federal ozone nonattainment classification is wholly due to transport from the South Coast Air Basin, thus the stringency of the NOx and VOC precursor control strategy necessary for the district to meet the 1994 ozone planning requirements for attainment and rate of progress demonstrations is primarily dependent upon the severity of the problem in the South Coast, as well as the mix and location of sources which contribute to ozone precursor concentrations and the timing and stringency of previously adopted controls in that area.

5. Mobile source controls on new cars, trucks, buses, off-road equipment, and other mobile source categories are a vital element of the attainment equation in the South Coast and Mojave Desert, without which the area will not be able to meet the attainment deadline specified in the Act and without the areas cannot reach their projected reduction targets.

6. The ARB and the U.S. EPA share responsibility for controlling new mobile sources and both must adopt stringent controls on the sources within their respective jurisdictions.

7. The control of emissions from existing vehicles and engines through an enhanced inspection and maintenance program, old vehicle scrappage, and transportation and land use strategies to reduce vehicle miles travelled is dependent upon both state and local commitments.

8. Area sources such as solvents, architectural coatings, adhesives, pesticides and consumer products contribute an increasing percentage of ozone emissions and must be controlled by state and local agencies.

9. The Mojave Desert submittal reflects modifications to the district's 1993 ROP plan, which should be reflected in the plan to be submitted to U.S. EPA by November 15.

10. The SIP provides a current assessment of California's ozone situation by using the best available data to describe the emission inventory and its distribution across source categories, fully detailing the ozone problem in each of the affected nonattainment areas, and accurately describing ambient air quality data and trends.

11. The SIP bases its prescription for correcting outstanding ozone problems on state-of-the-art photochemical grid modeling which measures or estimates the region's responsiveness to a variety of emission reductions so that the most cost-effective strategies can be selected.

12. The attainment demonstration for the Mojave Desert portion of the SDMAQMA presents credible assurance, based upon calculations of the region's pollutant carrying capacity, its 1990 baseline emissions inventory, and the reductions reasonably anticipated from existing and additional measures in the South Coast Air Basin, that the area will attain the NAAQS for ozone by 2007.

13. The new mobile source control measures proposed for adoption and implementation by the ARB within the next 30 months for medium- and heavy-duty vehicles, as well as the additional mid-term measures proposed for later adoption and the long-term measures which rely on the development of advanced technology, will supplement ARB's current stringent standards for vehicles and fuels and are the most ambitious measures which are feasible, supplying a central and imperative strategy to reduce emissions from the most significant single source of ozone precursors in the State.

14. The mid-term and long-term consumer products regulations which will supplement existing regulations will achieve significant VOC reductions statewide; are necessary to ensure that the Southeast Desert portion of the SDMAQMA will meet the ozone NAAQS; will lead to the development of programs which will foster innovative technologies for long-term application; and will continue to provide flexibility to the product manufacturers through the use of market incentives.

15. The development of innovative technologies, upon which long-term emission reductions from consumer products are dependent, necessitate increased cooperation from, and coordination with, the U.S. EPA and the encouragement of controls at the national level.

16. Controls on VOC emissions from the agricultural and structural use of economic poisons have been under study and development for several years by the DPR, the ARB, and the districts, and are a feasible, cost-effective, and necessary means of progressing towards attaining the ozone NAAQS statewide.

17. The control measures proposed by DPR should be included in the SIP with an expeditious adoption schedule.

18. The U.S. EPA has a clear and present duty to control several categories of mobile sources on a national level and must rapidly and diligently meet its responsibilities if California is to attain the ozone NAAQS by the dates set forth in the Act.

19. The mobile source control measures identified in the proposed SIP for adoption by U.S. EPA are feasible, cost-effective, socially acceptable, and would provide a larger market base to manufacturers, which would encourage the development of new technology.

20. The state measures are cost-effective in consideration of the substantial air quality improvements and public health benefits which will result from their implementation.

21. The ARB is the lead agency for the mobile source and consumer product elements of the SIP, has considered the environmental analysis set forth in Volume II of the Staff Report, and concurs in the discussion of potential impacts.

22. While there may be adverse secondary environmental impacts from the accelerated vehicle retirement program and the electric vehicle program, the effects are speculative and cannot be quantified until the scope of these programs is defined by proposed regulations, or (for electric vehicles) until the regulations are implemented and the state of battery technology is known.

23. As regulations implementing the new mobile source measures are developed, detailed environmental impact analyses, including a discussion of regulatory alternatives and mitigation measures, will be performed in conjunction with the rulemaking process.

24. At this time there are no feasible mitigation measures which the ARB can impose to lessen the potential adverse impacts of the mobile source measures on the environment, and no less stringent alternatives which will accomplish the goal imposed by federal law with fewer potential environmental impacts.

25. The potential adverse impacts identified for the mobile source measures are vastly outweighed by the substantial air quality benefits, especially the reduction of VOC emissions, which will result from their adoption and implementation.

26. A monitoring program to keep track of the impacts of both currently adopted and proposed mobile source measures should be undertaken by the staff in conjunction with the development and implementation of the measures.

27. Future regulatory activities involved with the consumer products control program are anticipated to entail additional or expanded applications of the existing regulations and the Alternative Control Plan, which were subject to detailed environmental analyses which concluded that no significant adverse environmental impacts would result, and hence no adverse impacts are anticipated.

28. As the SIP measures for consumer products are developed into regulations, potential impacts, alternatives, and mitigation measures will be analyzed in detail, particularly with regard to the possibility of stratospheric ozone depletion, global warming, creation of localized VOC "hot spots," generation of toxic air contaminants, potential increased use due to reduced efficacy, and VOC or toxic loading to water treatment facilities.

29. Mobile source and consumer products regulations which have been adopted and are proposed for inclusion in the SIP have undergone environmental review by the Board at the time of their adoption and no further analysis is required at this time.

30. The Mojave Desert AQMD board has adopted the district's plan, which has been submitted to the ARB for inclusion in the SIP, along with proof of publication and environmental documents in accordance with state and federal law.

31. The proposed Mojave Desert plan was available for public review and comment for at least 30 days as required by the Act and U.S. EPA regulations, and a public hearing was conducted, prior to adoption of the plan by the district governing board.

32. The Mojave Desert plan contains numerous measures to control ozone precursor emissions from a wide variety of stationary sources, and the post-1996 ROP demonstrations consist of both rules which have been adopted as well as legally enforceable commitments to adopt additional rules.

33. The measures contained in the final Mojave Desert plan for stationary, area, and transportation sources are the result of strenuous effort, consensus building, and the need to avoid stifling economic recovery, and are reasonable, cost-effective control strategies with expeditious adoption schedules.

34. Reconciliation has been achieved between the ARB and the Mojave Desert AQMD over the assignment of emission reductions to mobile source and other state measures, so that emission inventories and anticipated emission reductions from these sources are consistently and accurately reflected in the local plans.

35. The Mojave Desert plan accurately reflects the amounts of required VOC and NOx reductions which are anticipated to result from existing regulations, including ARB's low

emission vehicle/clean fuel standards and consumer products controls, and the reductions which will result from the adoption and implementation of new local regulations, new ARB regulations, and new federal measures.

36. The Mojave Desert portion of the Southeast Desert SDMAQMA is overwhelmed by air pollution from the South Coast Air Basin and the district is, therefore, primarily dependent on the South Coast attainment strategy to demonstrate progress toward attainment and attainment; accordingly the Mojave Desert should be afforded a waiver from the post-1996 ROP requirement pursuant to section 182(h) of the Act.

37. The final Mojave Desert SIP submittal accounts for a high percentage of the emissions reductions in the form of adopted measures and are sufficient to satisfy the completeness criterion set forth in the Act and U.S. EPA guidance.

38. The Mojave Desert plan is dependent upon state and federal measures for attainment of the ozone NAAQS, and reflects both a need for these measures and an understanding that jurisdiction for these measures exists in certain instances only with the State of California or the federal government.

39. The contingency measures set forth in the Mojave Desert plan represent the best effort which is possible at this time.

40. The final Mojave Desert plan provides for attainment based on state and local measures and anticipated national standards for sources under federal jurisdiction.

41. The ARB is a responsible agency under CEQA for the purpose of reviewing and approving the local element of the SIP, and has considered the environmental documentation provided by the Mojave Desert with its plan.

WHEREAS, additional responses to significant environmental issues raised in public testimony regarding the state measures are set forth in Attachment A to Resolution 94-60 , which is incorporated by reference herein.

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby approves the plan adopted by the Mojave Desert AQMD and submitted in final form to the ARB for inclusion in the SIP, and directs the Executive Officer to submit the plan, together with the appropriate supporting documentation, to the U.S. EPA for approval , and to work with the U.S. EPA and take necessary action to resolve any issues regarding plan completeness and approvability that may arise.

BE IT FURTHER RESOLVED, that the Board concurs that a waiver from the post-1996 ROP requirements for the Mojave Desert is appropriate and directs the Executive Officer to submit a formal, legally sufficient waiver request to the U.S. EPA forthwith.

BE IT FURTHER RESOLVED, that the Board certifies pursuant to 40 C.F.R. section 51.102 that the Mojave Desert plan being submitted as the 1994 ozone attainment and ROP demonstration SIP revision were adopted after notice and public hearing either by the state agencies responsible for the measures or by the districts as required by 40 CFR section 51.102 and directs the Executive Officer to submit the appropriate proofs of publication of the hearing notices to U.S. EPA along with the SIP submittal.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to convey to U.S. EPA the Board's emphatic assertion that it is necessary for U.S. EPA immediately to begin to develop and adopt those measures for the sources under federal jurisdiction which the ARB has identified as being the responsibility of the U.S. EPA to control, and to continue to meet and confer with the U.S. EPA and other interested persons, including the district, industry, and the public, until the necessary federal measures are proposed, adopted, and implemented.

I hereby certify that the above is a true and correct copy of Resolution 94-64 as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

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State of California
AIR RESOURCES BOARD

Resolution No. 94-65

November 15, 1994

WHEREAS, the Legislature in Health and Safety Code section 39602 has designated the state Air Resources Board (ARB or Board) the air pollution control agency for all purposes set forth in federal law;

WHEREAS, the ARB is responsible for the preparation of the state implementation plan (SIP) for attaining and maintaining the national ambient air quality standards (NAAQS) as required by the federal Clean Air Act (the Act; 42 U.S.C. section 7401 et seq.), and to this end is directed by Health and Safety Code section 39602 to coordinate the activities of all local and regional air pollution control and air quality management districts ("districts") necessary to comply with the Act;

WHEREAS, section 39602 also provides that the SIP shall include only those provisions necessary to meet the requirements of the Act;

WHEREAS, sections 39515 and 39516 of the Health and Safety Code provide that any duty may be delegated to the Board's Executive Officer as the Board deems appropriate;

WHEREAS, the Act as amended in 1990 requires the State of California to submit to the United States Environmental Protection Agency (U.S. EPA) a revision to the SIP for ozone nonattainment areas designated as "serious," "severe," and "extreme" in accordance with section 181 of the Act by November 15, 1994;

WHEREAS, section 182(e)(2)(A) of the Act requires the revision for these serious and above nonattainment areas to demonstrate attainment of the ozone NAAQS by the applicable attainment date specified in section 181 ("attainment demonstration");

WHEREAS, pursuant to section 181(a) of the Act, the San Joaquin Valley is classified as a "serious" ozone nonattainment area with an attainment date of 1999;

WHEREAS, section 182(c)(2)(B) of the Act requires the revision for each serious and above nonattainment area to demonstrate at least a three percent per year average reduction in emissions of volatile organic compounds (VOCs) after 1996, or to demonstrate that a reduction by a lesser amount reflects all measures that can feasibly be implemented in the area ("post-1996 rate of progress demonstration");

WHEREAS, the Act requires an enhanced vehicle inspection and maintenance (I/M) program for all serious, severe, and extreme non-attainment areas;

WHEREAS, sections 172(c)(9), 182(c)(9), and 182(e)(5) of the Act require that SIPs contain contingency measures to be implemented if a nonattainment area fails to make reasonable further progress or fails to attain a NAAQS by the applicable date;

WHEREAS, the districts have primary responsibility for the control of air pollution from nonvehicular sources and for adopting control measures, rules, and regulations to attain the NAAQS within their boundaries pursuant to sections 39002, 40000, 40001, 41111 and 41650 of the Health and Safety Code;

WHEREAS, section 41650 of the Health and Safety Code require the ARB to adopt the nonattainment plan approved by a district as part of the SIP unless the Board finds, after public hearing, that the plan does not meet the requirements of the Act;

WHEREAS, the ARB has primary responsibility for the control of air pollution from vehicular sources, including motor vehicle fuels, as specified in sections 39002, 39500, and Part 5 (commencing with section 43000) of the Health and Safety Code, and for ensuring that the districts meet their responsibilities under the Act pursuant to sections 39002, 39500, 39602, and 41650 of the Health and Safety Code;

WHEREAS, the ARB has been directed by the Legislature to regulate consumer products in order to reduce emissions of VOCs pursuant to section 41712 of the Health and Safety Code;

WHEREAS, the ARB is authorized by Health and Safety Code section 39600 to do such acts as may be necessary for the proper execution of its powers and duties;

WHEREAS, the Board staff has prepared statewide elements for consumer products and mobile sources for inclusion in the 1994 ozone SIP submittal;

WHEREAS, the consumer products element consists of near-term, mid-term, and long-term measures comprising a mix of existing regulations, regulations which will cover additional product categories not subject to the current program, and measures which rely on new technologies along with market incentives and consumer education;

WHEREAS, the mobile source element is comprised of existing control strategies and near-term and long-term state and federal measures which will achieve emission reductions from on- and off-road mobile sources including passenger cars, light-duty trucks, medium-duty vehicles, heavy-duty vehicles, and off-road equipment;

WHEREAS, the Bureau of Automotive Repair (BAR) has prepared and is preparing a SIP element to achieve emission reductions from an enhanced Inspection and Maintenance Program in

accordance with Assembly Bill No. 2018 (Stats. 1994, c. 27), Senate Bill 198 (Stats. 1994, c. 28) and SB 521 (Stats. 1994, c. 29);

WHEREAS, the Department of Pesticide Regulation (DPR) has prepared a SIP element to achieve emission reductions from pesticides;

WHEREAS, the 1994 ozone SIP revisions include the nonattainment plan ("plan") prepared by the San Joaquin Valley Air Quality Management District (AQMD), along with environmental documentation as required by the California Environmental Quality Act (CEQA) and certifications of public notice as required by U.S. EPA;

WHEREAS, the resolution adopting the San Joaquin Valley plan indicates that while the total emission reductions estimated in each plan will be achieved, the exact mix of control strategies and the quantity of reductions associated with them may be different than the district estimated for those sources under the sole jurisdiction of the ARB and the U.S. EPA;

WHEREAS, federal law set forth in section 110(l) of the Act and Title 40, Code of Federal Regulations, section 51.102 require that one or more public hearings, preceded by at least 30 days notice and opportunity for public review, must be conducted prior to the adoption and submittal to U.S. EPA of any SIP revision;

WHEREAS, CEQA and Board regulations require that prior to taking any action or engaging in any activity which may have a significant adverse effect on the environment, alternatives and mitigation measures to minimize any significant impact will be described and imposed by the Board where feasible;

WHEREAS, the ARB Staff Report, which summarizes and explains the contents of the proposed SIP revision (including descriptions of both statewide and local regional elements), the requirements applicable to the SIP revision and the environmental impacts of the statewide mobile source and consumer product elements, along with alternatives and mitigation to reduce such impacts, has been available for public review at least 30 days prior to the hearing;

WHEREAS, the Board has conducted a public hearing to consider approval of the San Joaquin Valley plan and its submittal to U.S. EPA as a SIP revision;

WHEREAS, in consideration of the Staff Report; the proposed statewide and San Joaquin Valley SIP elements; the environmental documentation prepared by Board staff and by the district; the written and oral testimony presented by the districts, the public, interested government agencies, and the regulated industry; and the economic assessments prepared by Board staff, the Office of Planning and Research, the Business, Housing and Transportation Agency, and the independent consultant M.Cubed., the Board finds:

1. Healthful air must be achieved through an intensive and coordinated local, state, and federal effort to attain the NAAQS for ozone in the San Joaquin Valley by 1999.

2. While statewide exposure to unhealthful ozone concentrations has been reduced by about 50% since 1980, along with the frequency and severity of ozone pollution episodes, due to California's existing regulations on both vehicular and non-vehicular sources, more must be done.

3. Emission sources under federal jurisdiction are increasingly significant contributors to ozone pollution as emissions from other source categories are reduced through state and local controls.

4. The stringency of the NOx and VOC precursor control strategy necessary for the San Joaquin Valley to meet the 1994 ozone planning requirements for attainment and rate of progress (ROP) demonstrations are dependent upon the severity of the problem in the district, the mix and location of sources which contribute to ozone precursor concentrations, and the timing and stringency of previously adopted controls.

5. Mobile source controls on new cars, trucks, buses, off-road equipment, and other mobile source categories are a vital element of the attainment equation in the San Joaquin Valley, without which the area will not be able to meet the attainment deadline specified in the Act.

6. The ARB and the U.S. EPA share responsibility for controlling new mobile sources and both must adopt stringent controls on the sources within their respective jurisdictions.

7. The control of emissions from existing vehicles and engines through an enhanced inspection and maintenance program, old vehicle scrappage, and transportation and land use strategies to reduce vehicle miles travelled is dependent upon both state and local commitments.

8. Area sources such as solvents, architectural coatings, adhesives, pesticides and consumer products contribute an increasing percentage of ozone emissions and must be controlled by state and local agencies.

9. The San Joaquin Valley submittal reflects modifications to the district's 1993 ROP plan, which should be reflected in the SIP submittal forwarded to U.S. EPA by November 15.

10. The SIP provides a current assessment of California's ozone situation by using the best available data to describe the emission inventory and its distribution across source categories, fully detailing the ozone problem in each of the affected nonattainment areas, and accurately describing ambient air quality data and trends.

11. The SIP bases its prescription for correcting outstanding ozone problems on state-of-the-art photochemical grid modeling which measures or estimates the region's responsiveness to a variety of emission reductions so that the most cost-effective strategies can be selected.

12. The attainment demonstration for the San Joaquin Valley presents credible assurance, utilizing the photochemical grid model prepared for the area, the 1990 baseline and the 1999 projected emission inventory, and the reductions reasonably anticipated from existing and additional measures, that the San Joaquin Valley will attain the NAAQS for ozone by 1999.

13. The new mobile source control measures proposed for adoption and implementation by the ARB within the next 30 months for medium- and heavy-duty vehicles, as well as the additional mid-term measures proposed for later adoption and the long-term measures which rely on the development of advanced technology, will supplement ARB's current stringent standards for vehicles and fuels and are the most ambitious measures which are feasible, supplying a central and imperative strategy to reduce emissions from the most significant single source of ozone precursors in the State.

14. The mid-term and long-term consumer products regulations which will supplement existing regulations will achieve significant VOC reductions statewide; will lead to the development of programs which will foster innovative technologies for long-term application; and will continue to provide flexibility to the product manufacturers through the use of market incentives.

15. The development of innovative technologies, upon which long-term emission reductions from consumer products are dependent, necessitate increased cooperation from, and coordination with, the U.S. EPA and the encouragement of controls at the national level.

16. Controls on VOC emissions from the agricultural and structural use of economic poisons have been under study and development for several years by the DPR, the ARB, and the districts, and are a feasible, cost-effective, and necessary means of progressing towards attaining the ozone NAAQS statewide.

17. The control measures proposed by DPR should be included in the SIP with an expeditious adoption schedule.

18. The U.S. EPA has a clear and present duty to control several categories of mobile sources on a national level and must rapidly and diligently meet its responsibilities if California is to attain the ozone NAAQS by the dates set forth in the Act.

19. The mobile source control measures identified in the proposed SIP for adoption by U.S. EPA are feasible, cost-effective, socially acceptable, and would provide a larger market base to manufacturers, which would encourage the development of new technology.

20. The state measures are cost-effective in consideration of the substantial air quality improvements and public health benefits which will result from their implementation.

21. The ARB is the lead agency for the mobile source and consumer product elements of the SIP, has considered the environmental analysis set forth in Volume II of the Staff Report, and concurs in the discussion of potential impacts.

22. While there may be adverse secondary environmental impacts from the accelerated vehicle retirement program and the electric vehicle program, the effects are speculative and cannot be quantified until the scope of these programs is defined by proposed regulations, or (for electric vehicles) until the regulations are implemented and the state of battery technology is known.

23. As regulations implementing the new mobile source measures are developed, detailed environmental impact analyses, including a discussion of regulatory alternatives and mitigation measures, will be performed in conjunction with the rulemaking process.

24. At this time there are no feasible mitigation measures which the ARB can impose to lessen the potential adverse impacts of the mobile source measures on the environment, and no less stringent alternatives which will accomplish the goal imposed by federal law with fewer potential environmental impacts.

25. The potential adverse impacts identified for the mobile source measures are vastly outweighed by the substantial air quality benefits, especially the reduction of VOC emissions, which will result from their adoption and implementation.

26. A monitoring program to keep track of the impacts of both currently adopted and proposed mobile source measures should be undertaken by the staff in conjunction with the development and implementation of the measures.

27. Future regulatory activities involved with the consumer products control program are anticipated to entail additional or expanded applications of the existing regulations and the Alternative Control Plan, which were subject to detailed environmental analyses which concluded that no significant adverse environmental impacts would result, and hence no adverse impacts are anticipated.

28. As the SIP measures for consumer products are developed into regulations, potential impacts, alternatives, and mitigation measures will be analyzed in detail, particularly with

regard to the possibility of stratospheric ozone depletion, global warming, creation of localized VOC "hot spots," generation of toxic air contaminants, potential increased use due to reduced efficacy, and VOC or toxic loading to water treatment facilities.

29. Mobile source and consumer products regulations which have been adopted and are proposed for inclusion in the SIP have undergone environmental review by the Board at the time of their adoption and no further analysis is required at this time.

30. The San Joaquin Valley AQMD has adopted the district plan, which has been submitted to the ARB for inclusion in the SIP, along with proof of publication and environmental documents in accordance with state and federal law.

31. The San Joaquin Valley plan was available for public review and comment for at least 30 days as required by the Act and U.S. EPA regulations, and public hearings were conducted, prior to adoption of the plan by the district governing board.

32. The San Joaquin Valley plan contains numerous measures to control ozone precursor emissions from a wide variety of stationary sources, and the post-1996 ROP demonstrations consist of both rules which have been adopted as well as legally enforceable commitments to adopt additional rules.

33. The measures contained in the final San Joaquin Valley plan for stationary, area, and transportation sources are the result of strenuous effort, consensus building, and the need to avoid stifling economic recovery, and are reasonable, cost-effective control strategies with expeditious adoption schedules.

34. Reconciliation has been achieved between the ARB and the San Joaquin Valley AQMD over the assignment of emission reductions to mobile source and other state measures, so that emission inventories and anticipated emission reductions from these sources are consistently and accurately reflected in the local plans.

35. The San Joaquin Valley plan accurately reflects the amounts of required VOC and NOx reductions which are anticipated to result from existing regulations, including ARB's low emission vehicle/clean fuel standards and consumer products controls, and the reductions which will result from the adoption and implementation of new local regulations, new ARB regulations, and new federal measures.

36. The San Joaquin Valley plan sets forth rate-of-progress calculations from 1997 through the attainment year, indicating 3% annual reductions in VOCs averaged over three-year periods and corrected the initial ROP plans, which provided a 15% VOC reduction from 1990-1996, as submitted in November 1993.

37. The draft San Joaquin Valley SIP submittal accounts for a high percentage of the emissions reductions in the form of adopted measures and are sufficient to satisfy the completeness criterion set forth in the Act and U.S. EPA guidance.

38. The San Joaquin Valley plan is dependent upon state and federal measures for attainment of the ozone NAAQS, and reflects both a need for these measures and an understanding that jurisdiction for these measures exists in certain instances only with the State of California or the federal government.

39. The contingency measures set forth in the San Joaquin Valley plan represent the best effort which is possible at this time.

40. The final San Joaquin Valley plan provides for attainment based on state and local measures and anticipated national standards for sources under federal jurisdiction.

41. The Kern County portion of the Southeast Desert was spun off from the San Joaquin Valley in May of 1992; preliminary data indicates the area has a marginal ozone problem and is dominated by overwhelming transport from the San Joaquin Valley and the South Coast Air Basin and the necessary emission reductions will be achieved by implementation of the plans for those two areas.

42. The ARB is a responsible agency under CEQA for the purpose of reviewing and approving the local element of the SIP, and has considered the environmental documentation provided by the San Joaquin Valley with its plan.

WHEREAS, additional responses to significant environmental issues raised in public testimony regarding the state measures are set forth in Attachment A to Resolution 94-60 , which is incorporated by reference herein.

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby approves the plan adopted by the San Joaquin Valley AQMD and submitted in form to the ARB for inclusion in the SIP, directs the Executive Officer to submit the plan, together with the appropriate supporting documentation, to the U.S. EPA for approval, and to work with the U.S. EPA and take necessary action to resolve any issues regarding plan completeness and approvability that may arise.

BE IT FURTHER RESOLVED, that the Board certifies pursuant to 40 C.F.R. section 51.102 that the San Joaquin Valley plan being submitted as the 1994 ozone attainment and ROP demonstration SIP revision were adopted after notice and public hearing either by the state agencies responsible for the measures or by the districts as required by 40 CFR section 51.102 and directs the Executive Officer to submit the appropriate proofs of publication of the hearing notices to U.S. EPA along with the SIP submittal.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to convey to U.S. EPA the Board's emphatic assertion that it is necessary for U.S. EPA immediately to begin to develop and adopt those measures for the sources under federal jurisdiction which the ARB has identified as being the responsibility of the U.S. EPA to control, and to continue to meet and confer with the U.S. EPA and other interested persons, including the district, industry, and the public, until the necessary federal measures are proposed, adopted, and implemented.

I hereby certify that the above is a true and correct copy of Resolution 94-65 as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

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State of California
AIR RESOURCES BOARD

Resolution No. 94-66

November 15, 1994

WHEREAS, the Legislature in Health and Safety Code section 39602 has designated the state Air Resources Board (ARB or Board) the air pollution control agency for all purposes set forth in federal law;

WHEREAS, the ARB is responsible for the preparation of the state implementation plan (SIP) for attaining and maintaining the national ambient air quality standards (NAAQS) as required by the federal Clean Air Act (the Act; 42 U.S.C. section 7401 et seq.), and to this end is directed by Health and Safety Code section 39602 to coordinate the activities of all local and regional air pollution control and air quality management districts necessary to comply with the Act;

WHEREAS, section 39602 also provides that the SIP shall include only those provisions necessary to meet the requirements of the Act;

WHEREAS, sections 39515 and 39516 of the Health and Safety Code provide that any duty may be delegated to the Board's Executive Officer as the Board deems appropriate;

WHEREAS, the Act as amended in 1990 requires the State of California to submit to the United States Environmental Protection Agency (U.S. EPA) a revision to the SIP for ozone nonattainment areas designated as "serious," "severe," and "extreme" in accordance with section 181 of the Act by November 15, 1994;

WHEREAS, section 182(e)(2)(A) of the Act requires the revision for these serious and above nonattainment areas to demonstrate attainment of the ozone NAAQS by the applicable attainment date specified in section 181 ("attainment demonstration");

WHEREAS, section 181(b)(3) of the Act authorizes any state that has an area that will be unable to attain the NAAQS by the applicable deadline to request a voluntary reclassification to a higher classification ("bump-up"), provided the area is prepared to comply with the Act's requirements for the new classification;

WHEREAS, the Sacramento Metropolitan Area, consisting of the following five districts: Sacramento Metropolitan Air Quality Management District (AQMD), and the El Dorado, Feather River, Placer and Yolo-Solano Air Pollution Control Districts ("districts"), is currently classified as a serious ozone nonattainment area under section 181(a) of the Act, and has proposed a 2005 attainment date which requires voluntary reclassification as severe in accordance with section 181(b)(3);

WHEREAS, section 182(c)(2)(B) of the Act requires the revision for each serious and above nonattainment area to demonstrate at least a three percent per year average reduction in emissions of volatile organic compounds (VOCs) after 1996, or to demonstrate that a reduction by a lesser amount reflects all measures that can feasibly be implemented in the area ("post-1996 rate of progress demonstration");

WHEREAS, the Act requires an enhanced vehicle inspection and maintenance (I/M) program for all serious, severe, and extreme non-attainment areas;

WHEREAS, sections 172(c)(9), 182(c)(9), and 182(e)(5) of the Act require that SIPs contain contingency measures to be implemented if a nonattainment area fails to make reasonable further progress or fails to attain a NAAQS by the applicable date;

WHEREAS, the U.S. EPA is in the process of imposing a federal implementation plan (FIP) on the Sacramento Area, due to the districts' failure to meet certain requirements set forth in the Act prior to its amendment in 1990;

WHEREAS, the Act allows SIP measures which meet all applicable requirements to be substituted for FIP measures;

WHEREAS, the districts have primary responsibility for the control of air pollution from nonvehicular sources and for adopting control measures, rules, and regulations to attain the NAAQS within their boundaries pursuant to sections 39002, 40000, 40001and 41650 of the Health and Safety Code;

WHEREAS, section 41650 of the Health and Safety Code requires the ARB to adopt the nonattainment plan approved by a district as part of the SIP unless the Board finds, after a public hearing, that the plan does not meet the requirements of the Act;

WHEREAS, the ARB has primary responsibility for the control of air pollution from vehicular sources, including motor vehicle fuels, as specified in sections 39002, 39500, and Part 5 (commencing with section 43000) of the Health and Safety Code, and for ensuring that the districts meet their responsibilities under the Act pursuant to sections 39002, 39500, 39602 and 41650 of the Health and Safety Code;

WHEREAS, the ARB has been directed by the Legislature to regulate consumer products in order to reduce emissions of VOCs pursuant to section 41712 of the Health and Safety Code;

WHEREAS, the ARB is authorized by Health and Safety Code section 39600 to do such acts as may be necessary for the proper execution of its powers and duties;

WHEREAS, the Board staff has prepared statewide elements for consumer products and mobile sources for inclusion in the 1994 ozone SIP submittal;

WHEREAS, the consumer products element consists of near-term, mid-term, and long-term measures comprising a mix of existing regulations, regulations which will cover additional product categories not subject to the current program, and measures which rely on new technologies along with market incentives and consumer education;

WHEREAS, the mobile source element is comprised of existing control strategies and near-term and long-term state and federal measures which will achieve emission reductions from on- and off-road mobile sources including passenger cars, light-duty trucks, medium-duty vehicles, heavy-duty vehicles, and off-road equipment;

WHEREAS, the Bureau of Automotive Repair (BAR) has prepared and is preparing SIP elements to achieve emission reductions from an enhanced Inspection and Maintenance Program in accordance with Assembly Bill 2018 (Stats. 1994, c. 27), Senate Bill 198 (Stats. 1994, c. 28) and SB 521 (Stats. 1994, c. 29);

WHEREAS, the Department of Pesticide Regulation (DPR) has prepared SIP elements to achieve emission reduction from pesticides;

WHEREAS, the 1994 ozone SIP revisions include the draft regional attainment plan prepared by the Sacramento Area districts ("plan"), along with environmental documentation as required by the California Environmental Quality Act (CEQA) and certifications of public notice as required by U.S. EPA;

WHEREAS, federal law set forth in section 110(l) of the Act and Title 40, Code of Federal Regulations, section 51.102 require that one or more public hearings, preceded by at least 30 days notice and opportunity for public review, must be conducted prior to the adoption and submittal to U.S. EPA of any SIP revision;

WHEREAS, CEQA and Board regulations require that prior to taking any action or engaging in any activity which may have a significant adverse effect on the environment, alternatives and mitigation measures to minimize any significant impact will be described and imposed by the Board where feasible;

WHEREAS, the ARB Staff Report, which summarizes and explains the contents of the proposed SIP revision (including descriptions of both statewide and local regional elements), the requirements applicable to the SIP revision and the environmental impacts of the statewide mobile source and consumer product elements, along with alternatives and mitigation to reduce such impacts, has been available for public review at least 30 days prior to the hearing;

WHEREAS, the Board has conducted a public hearing to consider approval of the local and regional SIP elements and their submittal to U.S. EPA as SIP revisions;

WHEREAS, in consideration of the Staff Report; the proposed statewide and local/regional SIP elements; the environmental documentation prepared by Board staff and by district; the written and oral testimony presented by the districts, the public, interested government agencies, and the regulated industry; and the economic assessments prepared by Board staff, the Office of Planning and Research, the Business, Housing and Transportation Agency, and the independent consultant M.Cubed, the Board finds:

1. Healthful air must be achieved through an intensive and coordinated local, state, and federal effort to attain the NAAQS for ozone in the Sacramento Area by 2005.

2. While statewide exposure to unhealthful ozone concentrations has been reduced by about 50% since 1980, along with the frequency and severity of ozone pollution episodes, due to California's existing regulations on both vehicular and non-vehicular sources, more must be done.

3. Emission sources under federal jurisdiction are increasingly significant contributors to ozone pollution as emissions from other source categories are reduced through state and local controls.

4. The stringency of the NOx and VOC precursor control strategy necessary for the Sacramento Area districts to meet the 1994 ozone planning requirements for attainment and rate of progress demonstrations (ROP) are dependent upon the severity of the problem in the districts, the mix and location of sources which contribute to ozone precursor concentrations, and the timing and stringency of previously adopted controls.

5. Mobile source controls on new cars, trucks, buses, off-road equipment, and other mobile source categories are a vital element of the attainment equation in every affected area, without which the Sacramento Area will not be able to meet the attainment deadline specified in the Act.

6. The ARB and the U.S. EPA share responsibility for controlling new mobile sources and both must adopt stringent controls on the sources within their respective jurisdictions.

7. The control of emissions from existing vehicles and engines through an enhanced inspection and maintenance program, old vehicle scrappage, and transportation and land use strategies to reduce vehicle miles travelled is dependent upon both state and local commitments.

8. A regional program to accelerate reductions in mobile source NOx emissions is necessary to demonstrate attainment in the Sacramento Area.

9. Area sources such as solvents, architectural coatings, adhesives, pesticides and consumer products contribute an increasing percentage of ozone emissions and must be controlled by state and local agencies.

10. The SIP must be submitted to and approved by the U.S. EPA prior to promulgation of the federal implementation plan (FIP) for the Sacramento Area scheduled for early next year in order to replace the FIP process and reinstate California's control over its air pollution program.

11. The SIP provides a current assessment of California's ozone situation by using the best available data to describe the emission inventory and its distribution across source categories, fully detailing the ozone problem in each of the affected nonattainment areas, and accurately describing ambient air quality data and trends.

12. The SIP bases its prescription for correcting outstanding ozone problems on state-of-the-art photochemical grid modeling which measures or estimates each region's responsiveness to a variety of emission reductions so that the most cost-effective strategies can be selected.

13. The attainment demonstration for the Sacramento Area presents credible assurance, based upon calculations of the region's pollutant carrying capacity, its 1990 baseline emissions inventory, and the reductions reasonably anticipated from existing and additional measures, that the Sacramento Area will attain the NAAQS for ozone by 2005.

14. The Sacramento Area, which is currently designated as a "serious" ozone nonattainment area, must be bumped up to "severe" in order to allow it to catch up on control measures without imposing an infeasible, overly harsh control regimen.

15. The new mobile source control measures proposed for adoption and implementation by the ARB within the next 30 months for medium- and heavy-duty vehicles, as well as the additional mid-term measures proposed for later adoption and the long-term measures which rely on the development of advanced technology, will supplement ARB's current stringent standards for vehicles and fuels and are the most ambitious measures which are feasible, supplying a central and imperative strategy to reduce emissions from the most significant single source of ozone precursors in the State.

16. The mid-term and long-term consumer products regulations which will supplement existing regulations will achieve significant VOC reductions statewide; will lead to the

development of programs which will foster innovative technologies for long-term application; and will continue to provide flexibility to the product manufacturers through the use of market incentives.

17. The development of innovative technologies, upon which long-term consumer product regulations are dependent, necessitate increased cooperation from, and coordination with, the U.S. EPA and the encouragement of controls at the national level.

18. Controls on VOC emissions from the agricultural and structural use of economic poisons have been under study and development for several years by the DPR, the ARB, and the Districts, and are a feasible, cost-effective, and necessary means of progressing towards attaining the ozone NAAQS statewide.

19. The control measures proposed by DPR should be included in the SIP with an expeditious adoption schedule.

20. The U.S. EPA has a clear and present duty to control several categories of mobile sources on a national level and must rapidly and diligently meet its responsibilities if California is to attain the ozone NAAQS by the dates set forth in the Act.

21. The mobile source control measures identified in the proposed SIP for adoption by U.S. EPA are feasible, cost-effective, socially acceptable, and would provide a larger market base to manufacturers, which would encourage the development of new technology.

22. The state measures are cost-effective in consideration of the substantial air quality improvements and public health benefits which will result from their implementation, and are more cost-effective than their counterparts proposed in the FIP.

23. The ARB is the lead agency for the mobile source and consumer product elements of the SIP, has considered the environmental analysis set forth in Volume II of the Staff Report, and concurs in the discussion of potential impacts.

24. While there may be adverse secondary environmental impacts from the accelerated vehicle retirement program and the electric vehicle program, the effects are speculative and cannot be quantified until the scope of these programs is defined by proposed regulations, or (for electric vehicles) until the regulations are implemented and the state of battery technology is known.

25. As regulations implementing the new mobile source measures are developed, detailed environmental impact analyses, including a discussion of regulatory alternatives and mitigation measures, will be performed in conjunction with the rulemaking process.

26. At this time there are no feasible mitigation measures which the ARB can impose to lessen the potential adverse impacts of the mobile source measures on the environment, and no less stringent alternatives which will accomplish the goal imposed by federal law with fewer potential environmental impacts.

27. The potential adverse impacts identified for the mobile source measures are vastly outweighed by the substantial air quality benefits, especially the reduction of VOC emissions, which will result from their adoption and implementation.

28. A monitoring program to keep track of the impacts of both currently adopted and proposed mobile source measures should be undertaken by the staff in conjunction with the development and implementation of the measures.

29. Future regulatory activities involved with the consumer products control program are anticipated to entail additional or expanded applications of the existing regulations and the Alternative Control Plan, which were subject to detailed environmental analyses which concluded that no significant adverse environmental impacts would result, and hence no adverse impacts are anticipated.

30. As the SIP measures for consumer products are developed into regulations, potential impacts, alternatives, and mitigation measures will be analyzed in detail, particularly with regard to the possibility of stratospheric ozone depletion, global warming, creation of localized VOC "hot spots," generation of toxic air contaminants, potential increased use due to reduced efficacy, and VOC or toxic loading to water treatment facilities.

31. Mobile source and consumer products regulations which have been adopted and are proposed for inclusion in the SIP have undergone environmental review by the Board at the time of their adoption and no further analysis is required at this time.

32. The majority of the Sacramento Area district governing boards have conceptually approved the draft regional plan, which has been submitted to the ARB along with proof of publication and environmental documents, in accordance with state and federal law.

33. The Sacramento Area regional plan will have been available from the appropriate district for public review and comment for at least 30 days as required by the Act and U.S. EPA regulations, and public hearings will have been conducted, prior to adoption of the plan by the district governing boards.

34. The Sacramento Area regional plan contains numerous measures to control ozone precursor emissions from a wide variety of mobile and stationary sources, and the post-

1996 ROP demonstrations consist of both rules which have been adopted as well as legally enforceable commitments to adopt rules which result in unique attainment strategies in each area.

35. The measures contained in the conceptually approved regional plan for mobile, stationary, area, and transportation sources are the result of strenuous effort, consensus building, and the need to avoid stifling economic recovery, and are reasonable, cost-effective control strategies with expeditious adoption schedules.

36. Reconciliation has been achieved between the ARB and the district which assigned control measures and emission reductions to mobile source and other state measures, so that emission inventories and anticipated emission reductions from these sources are consistently and accurately reflected in the local plans.

37. The Sacramento Area regional plan accurately indicate the amounts of required VOC and NOx reductions which are anticipated to result from existing regulations, including ARB's low emission vehicle/clean fuel standards and consumer products controls, and the reductions which will result from the adoption and implementation of new local regulations, new ARB regulations, and new federal measures.

38. The Sacramento Area regional plan sets forth rate-of-progress calculations from 1997 through the attainment year, indicating 3% annual reductions in VOCs averaged over three-year periods and corrected the initial ROP plans, which provided a 5% VOC reduction from 1990-1996, as submitted in November 1993.

39. The draft Sacramento Area SIP submittal accounts for a high percentage of the emissions reductions in the form of adopted measures and are sufficient to satisfy the completeness criterion set forth in the Act and U.S. EPA guidance.

40. The draft regional plan is dependent upon state and federal measures for attainment of the ozone NAAQS, and reflects both a need for these measures and an understanding that jurisdiction for these measures exists in certain instances only with the State of California or the federal government.

41. The contingency measures set forth in the Sacramento Area regional plan represents the best effort which is possible at this time.

42. Due to rapid projected population growth and the need for substantial NOx reductions from mobile sources, which require vehicle turnover in order to realize the benefits of new state and federal control measures, the Sacramento Area cannot attain the ozone NAAQS

by 1999 without extraordinary local measures which would cause severe economic disruptions.

43. The Sacramento Area's classification should be changed from "serious" to "severe" so that reductions in mobile source NOx can become effective in time to ensure attainment by 2005.

44. The draft Sacramento Area regional plan provides for attainment based on state and local measures and anticipated national standards for sources under federal jurisdiction, and do not rely on FIP measures.

45. The draft Sacramento Area regional plan meets all the requirements of the Act and should completely replace the proposed FIP measures upon approval by the U.S. EPA.

46. The ARB is a responsible agency under CEQA for the purpose of reviewing and approving the local element of the SIP, and has considered the environmental documentation provided by the districts with their plans.

WHEREAS, additional responses to significant environmental issues raised in public testimony regarding the state measures is set forth in Attachment A to Resolution 94-60, which is incorporated by reference herein.

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby conceptually approves the draft Sacramento Area regional plan for inclusion in the SIP and directs the Executive Officer to forward the draft plan to U.S. EPA to begin "parallel processing."

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to approve the plan after final adoption by the district governing boards and submit the final plan, together with the appropriate supporting documentation, to the U.S. EPA for approval, and to work with the U.S. EPA and take necessary action to resolve any issues regarding plan completeness and approvability that may arise.

BE IT FURTHER RESOLVED, that the Board concurs that a change in designation from "serious" to "severe" is necessary for the Sacramento Area and directs the Executive Officer to submit a formal, legally sufficient bump-up request to the U.S. EPA forthwith.

BE IT FURTHER RESOLVED, that the Board certifies pursuant to 40 C.F.R. section 51.102 that the Sacramento Area regional plan being submitted as the 1994 ozone attainment and ROP demonstration SIP revision was or will have been adopted after notice and public hearing either by the state agencies responsible for the measures or by the districts as required by 40 C.F.R.

section 51.102 and directs the Executive Officer to submit the appropriate proofs of publication of the hearing notices to U.S. EPA along with the SIP submittal.

BE IT FURTHER RESOLVED, that the Board intends the SIP submittals for the Sacramento Area to serve as a complete substitute to the proposed FIP for the region and directs the Executive Officer to request immediate action by the U.S. EPA to approve the SIP submittal in its entirety as a replacement for the FIPs prior to February 15, 1995.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to convey to U.S. EPA the Board's emphatic assertion that it is necessary for U.S. EPA immediately to begin to develop and adopt those measures for the sources under federal jurisdiction which the ARB has identified as being the responsibility of the U.S. EPA to control, and to continue to meet and confer with the U.S. EPA and other interested persons, including the district, industry, and the public, until the necessary federal measures are proposed, adopted, and implemented.

I hereby certify that the above is a true and correct copy of Resolution 94-66 as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

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STATE OF CALIFORNIA-CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
AIR RESOURCES BOARD
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State of California
AIR RESOURCES BOARD

Notice of Decision and
Response to Significant Environmental Issues

Item: NOTICE OF PUBLIC HEARING TO CONSIDER TECHNICAL STATUS AND PROPOSED REVISIONS TO MALFUNCTION AND DIAGNOSTIC SYSTEM REQUIREMENTS FOR 1994 MODEL-YEAR PASSENGER CARS, LIGHT-DUTY TRUCKS, AND MEDIUM DUTY VEHICLES AND ENGINES (OBD II)

Approved by: Resolution 94-67

Adopted by: Executive Order G-95-016
Dated: April 26, 1995

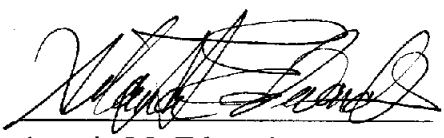
Agenda Item No.: 94-12-2

Public Hearing Date: December 8, 1994

Issuing Authority: Air Resources Board

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

Response: N/A

Certified: 
Artavia M. Edwards
Regulations Coordinator

Date: April 26, 1995

RECEIVED BY
Office of the Secretary
APR 26 1995
RESOURCES AGENCY OF CALIFORNIA

State of California
AIR RESOURCES BOARD

Resolution 94-67

December 8, 1994

Agenda Item No.: 94-12-2

WHEREAS, sections 39002 and 39003 of the Health and Safety Code charge the Board with the responsibility for systematically attacking the serious air pollution problem caused by motor vehicles;

WHEREAS, sections 39600 and 39601 of the Health and Safety code authorize the Board to adopt standards, rules and regulations and to do such acts as may be necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law;

WHEREAS, in section 43000 of the Health and Safety Code, the Legislature has declared that the emission of air pollutants from motor vehicles is the primary cause of air pollution in many parts of the state;

WHEREAS, in section 43000.5 of the Health and Safety Code, the Legislature found and declared that, despite significant reductions in vehicle emissions in recent years, continued growth in population and vehicle miles traveled throughout California have the potential not only to prevent attainment of the state standards, but in some cases, to result in worsening of air quality;

WHEREAS, section 43004 provides that unless expressly exempted, the exhaust emissions for gasoline-powered motor vehicles shall apply to motor vehicles which have been modified or altered to use a fuel other than gasoline or diesel;

WHEREAS, section 43006 provides that the ARB may certify the fuel system of any motor vehicle powered by a fuel other than gasoline or diesel which meets the standards specified by section 43004 and adopt test procedures for such certification;

WHEREAS, section 43013 of the Health and Safety Code authorizes the Board to adopt motor vehicle emission standards and in-use performance standards which it finds to be necessary, cost-effective, and technologically feasible;

WHEREAS, section 43018 of the Health and Safety Code directs the Board to achieve the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to accomplish the attainment of state standards at the earliest possible date;

WHEREAS, sections 39515 and 39516 of the Health and Safety Code provide that the Board may delegate any duty to the Executive Officer which the Board deems appropriate and that any power, duty, purpose, function, or

jurisdiction which the Board may lawfully delegate shall be conclusively presumed to have been delegated to the Executive Officer unless the Board has expressly reserved such authority onto itself;

WHEREAS, in July 1990, the Board adopted and the Office of Administrative Law subsequently approved regulations regarding "Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines," (OBD II), which are codified at Title 13, CCR, section 1968.1, and which set forth requirements for monitoring catalyst efficiency, engine misfire, evaporative system integrity, secondary air injection, and chlorofluorocarbon (CFC) containment; for improving current monitoring of the fuel system, oxygen sensor, EGR system, and other emission-related components of the on-board diagnostic system; and for standardizing fault codes, diagnostic repair equipment, the vehicle connector used for attaching the repair equipment to the vehicle, and the protocol for downloading repair information in order to improve the effectiveness of emission control system repairs;

Whereas, the Board adopted amendments to the OBD II regulations in 1991 and 1993, and the amendments were approved by the Office of Administrative Law;

WHEREAS, the staff has now proposed adoption of additional amendments to Title 13, CCR, section 1968.1, that, among other things, would provide manufacturers with additional guidance and/or flexibility in implementing and complying with the malfunction and diagnostic requirements of the regulations, including catalyst monitoring, misfire detection, tamper resistance, and applicability of the regulations to vehicles and engines that use diesel and alternate fuels, and would require manufacturers to develop monitoring strategies capable of detecting evaporative system leaks as small as the equivalent of a 0.020 inch diameter orifice.

WHEREAS, the staff has further proposed that Title 13, CCR, section 1968.1 be amended to provide the Executive Officer with authority to certify 1996-2000 model year vehicles required to comply with the malfunction and diagnostic requirements of the section, but do not fully meet the minimum requirements in one or more areas, provided that the manufacturers of such vehicles in some cases pay a fine for such nonconformance pursuant to section 43016 of the California Health and Safety Code;

WHEREAS, the staff has further proposed amendments to Title 13, CCR, sections 2030 and 2031 and the incorporated "California Certification and Installation Procedures for Alternative Fuel Retrofit systems for Motor Vehicles Certified for 1994 and Subsequent Model Years" to allow alternative fuel retrofit system manufacturers to disable specific on-board diagnostic monitoring strategies through the 1998 model year;

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

WHEREAS, pursuant to section 43013(e) of the Health and Safety Code, the Board has considered the effects of the proposed amendments to the regulations on the economy of the state;

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

WHEREAS, the Board finds that:

To date, more than 35 engine families have been certified as meeting the OBD II requirements for the applicable model years;

The proposed amendments to Title 13, CCR, section 1968.1 should help manufacturers continue to be able to certify systems in future model years by clarifying requirements and by making minor adjustments to the regulation based on technical and practical experience gained to date, which should ease the burdens manufacturers face in developing OBD II systems that comply with these regulations;

Significant numbers of vehicles continue to operate with deteriorated catalytic converters and that catalyst performance is crucial to maintaining vehicle emissions in compliance with the applicable standards; accordingly, it continues to be necessary to monitor catalyst performance; however, such monitoring can be done by evaluating malfunction criteria based on tailpipe emission levels;

In-use surveillance programs indicate that evaporative system leaks as small as 0.020 inches in diameter occur on a significant number of in-use vehicles causing excess evaporative emissions, and, therefore, evaporative monitoring systems that can detect leaks of this size, as well as other malfunctions, should significantly reduce in-use evaporative emissions from vehicles;

The monitoring of misfire over the full engine operating range is necessary because misfire contributes substantially to excess emissions and can cause catalyst overheating and failure;

On diesel fueled vehicles, the loss of compression or other malfunctions that prevent combustion in one or more cylinders and fuel system malfunctions cause excess emissions; monitoring systems that detect such malfunctions should significantly reduce such emissions from diesel fueled vehicles;

Manufacturers of alternative fuel vehicles and alternative fuel retrofit systems require additional leadtime to investigate the effects of alternate fuels on component performance and durability before full implementation of reliable OBD II systems on these vehicles can take place;

The proposed amendments should maximize the long-term effectiveness of the OBD II regulations by restructuring and enhancing current monitoring requirements based on the latest improvements in monitoring technologies;

The proposed amendments would enable manufacturers that have been unable to develop a fully complying OBD II system, despite good faith efforts, to certify such systems conditionally, through the 2000 model year, upon payment of a penalty in some cases;

The proposed amendments to Title 13, CCR, section 1968.1 are necessary, cost-effective, and technologically feasible to carry out the purposes of the California Clean Air Act; and

The proposed amendments to Title 13, CCR, section 1968.1, do not affect the Board's earlier findings that the full implementation of the regulation will result in emission reductions that will help attain and maintain national and air quality standards for ozone, carbon monoxide and nitrogen dioxide;

WHEREAS, the Board has determined, in accordance with the California Environmental Quality Act and Board regulations, that the proposed amendments to Title 13, CCR, section 1968.1, that provide that manufacturers may elect to phase-in the monitoring of misfire detection over the full range of operating conditions over a four year period and that manufacturers may be permitted to certify non-fully compliant OBD II systems, may have some short-term adverse environmental impacts in relation to the regulations presently in effect; however, overriding considerations exist for adoption of the proposed amendments:

Title 13, CCR, section 1968.1(b)(3.3) presently provides that for 1997 and later model year vehicles, misfire shall be monitored continuously and under all positive torque engine speeds and conditions; however, staff has determined, and the Board finds, that some engine and driveline characteristics, especially as they apply to engines with 10 or 12 cylinders, still preclude reliable misfire monitoring over the full range of operating conditions;

No equally effective alternative methods for misfire monitoring have been identified that would be cost-effective and technologically feasible for implementation by the 1997 model year.

Strict enforcement of the existing regulations could result in several engines not being able to be certified and available for sale in California; accordingly, amendments have been proposed to permit manufacturers to

phase-in the full-range misfire requirement over four years, beginning with the 1997 model year;

The proposed amendments to Title 13, CCR, section 1968.1(m) would enable manufacturers that have been unable to develop fully complying OBD II systems, despite good faith efforts, to certify such systems conditionally, through the 2000 model year;

Theoretically, allowing vehicles to be certified during the phase-in period even though they cannot be monitored over the full range of operating conditions could prevent the proper and immediate repair of emission control systems of such vehicles and could result in a possible increase in emissions;

However, such vehicles, even with the potential monitoring system deficiencies that have been identified, will be significantly more effective in reducing in-use vehicle emissions than malfunction and diagnostic systems that comply with pre-OBD II system requirements;

The certification of such vehicles would minimize economic hardship for vehicle manufacturers, distributors of such vehicles within California, and would minimize any resulting impact on vehicle availability and costs for consumers;

WHEREAS, the Board has determined, in accordance with the California Environmental Quality Act and Board regulations, that the proposed amendments to Title 13, CCR, sections 2230-2231 will not have significant adverse environmental impacts;

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves for adoption, with modification, the amendments to sections 1968.1 and 2230-2231, Title 13, California Code of Regulations and the documents incorporated therein, which were made available for public comment in Mail-Out 94-38 and are set forth in Attachment A. The modifications to the language of Attachment A are set forth in Attachment B.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to adopt Section 1968.1, Title 13, California Code of Regulations, after making the modified regulatory language and additional supporting documents and information available for public comment for a period of 15 days, provided that the Executive Officer shall consider such written comments regarding the modification and additional supporting documents and information as may be submitted during this period, shall make modifications as may be appropriate in light of the comments received, and shall present the

regulations to the Board for further consideration if he determines that this is warranted;

BE IT FURTHER RESOLVED that the Board hereby determines that pursuant to section 209(b) of the Clean Air Act the regulations adopted herein will not cause California motor vehicle emission standards, in the aggregate, to be less protective of public health and welfare than applicable federal standards, and will not cause the California requirements to be inconsistent with section 202(a) of the Clean Air Act;

BE IT FURTHER RESOLVED that the Executive Officer shall, upon adoption, forward the amended subsections to Title 13, CCR, section 1968.1, to the Administrator of the Environmental Protection Agency with a request for a waiver of federal preemption pursuant to section 209(b) of the Clean Air Act;

BE IT FURTHER RESOLVED that the Board directs the staff to continue to closely monitor vehicle manufacturers in complying with the requirements of section 1968.1, Title 13, CCR, and to report to the Board in 1996 if further amendments to the regulations are necessary for future model year vehicles.

I hereby certify that the above is a true and correct copy of Resolution 94-67 as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

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Office of the Secretary

APR 26 1995

RESOURCES AGENCY OF CALIFORNIA

State of California
AIR RESOURCES BOARD

Executive Order G-95-016

WHEREAS, on December 8, 1994, the Air Resources Board (the "Board") conducted a public hearing to consider the proposed amendment regarding the technical status and proposed revisions to malfunction and diagnostic system requirements for 1994 model-year passenger cars, light-duty trucks, and medium-duty vehicles and engines (OBD II);

WHEREAS, following the public hearing, the Board adopted Resolution 94-67, in which the Board approved the amendment of Title 13, California Code of Regulations (CCR), sections 1968.1, 2030, 2031, and the documents incorporated by reference therein, as set forth in Attachment A thereto;

WHEREAS, Resolution 94-67 directed the Executive Officer to adopt the regulations and incorporated documents, after making the modified regulatory language and additional supporting documents and information available for public comment for a period of 15 days, provided that the Executive Officer shall consider such written comments regarding the modification and additional supporting documents and information as may be submitted during this period, shall make modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if he determines that this is warranted;

WHEREAS, section 1968.1, 2030, and 2031, Title 13, CCR, and the documents incorporated by reference were made available to the public for a 15-day comment period, in accordance with the provisions of Title 1, CCR, section 44 with the Board-approving and confirming modifications to the original proposed text clearly indicated;

WHEREAS, one written comment was received during the 15-day comment period, but that comment was outside the scope of the modifications available for comment and does not require substantive modification nor reconsideration by the Board of the approved regulation, and the documents incorporated by reference;

WHEREAS, additional supporting documents and information were made available for public comment for a period of 15 days with the changes to the originally proposed text clearly indicated;

WHEREAS, no written comments were received during this subsequent 15-day comment period;

WHEREAS, the reporting requirements of the regulations and the amendments that have been adopted which apply to businesses are necessary for the health, safety, and welfare of the people of the State.

NOW, THEREFORE, IT IS ORDERED that the recitals and findings contained in Resolution 94-67 are incorporated herein.

IT IS FURTHER ORDERED that sections 1968.1, 2230, and 2231, Title 13, California Code of Regulations, and the documents incorporated by reference, are amended as set forth in Attachments 1 and 2 hereto.

Executed this 26th day of April, 1995, at Sacramento, California.

James D. Boyd
Executive Officer

Attachments

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APR 26 1995

RESOURCES AGENCY OF CALIFORNIA

STATE OF CALIFORNIA-CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY PETE WILSON, Governor

AIR RESOURCES BOARD
2020 L STREET
P.O. BOX 2815
SACRAMENTO, CA 95812

Notice of Decision and
Response to Significant Environmental Issues

Item: NOTICE OF PUBLIC HEARING TO CONSIDER AMENDMENTS TO THE FUEL SPECIFICATIONS FOR M100 FUEL METHANOL

Approved by: Resolution 94-68

Agenda Item No.: 94-12-3

Public Hearing Date: December 8, 1994

Issuing Authority: Air Resources Board

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

Response: N/A

Certified:

Artavia M. Edwards
Regulations Coordinator

Date: June 27, 1995

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Office of the Secretary

JUL 2 8 1995

RESOURCES AGENCY OF CALIFORNIA

State of California
AIR RESOURCES BOARD

Resolution 94-68

December 8, 1994

Agenda Item No.: 94-12-3

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (the Board or ARB) 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, Health and Safety Code section 43013 authorizes the Board to adopt and implement motor vehicle fuel specifications for the control of air contaminants which the Board has found to be necessary, cost-effective, and technologically feasible to carry out the purposes of Division 26 of the Health and Safety Code;

WHEREAS, sections 43018(a) and (b) of the Health and Safety Code direct the Board to endeavor to achieve the maximum degree of emission reduction possible from vehicular and other mobile sources in order to accomplish the attainment of the state ambient air quality standards at the earliest practicable date, and direct the Board no later than January 1, 1992 to take whatever actions are necessary, cost-effective, and technologically feasible in order to achieve, by December 31, 2000, specified reductions in the emissions of air pollutants from vehicular sources, including emissions of oxides of nitrogen (NOx) and particulate matter (PM);

WHEREAS, section 43018(c) of the Health and Safety Code provides that in carrying out section 43018, the Board shall adopt standards and regulations which will result in the most cost-effective combination of control measures on all classes of motor vehicles and motor vehicle fuel, including but not limited to specification of vehicular fuel composition;

WHEREAS, sections 43013 and 43018 of the Health and Safety Code further provide that in adopting standards and regulations pertaining to motor vehicle fuels, the Board shall consider the effect of the standards and regulations on the economy of the state;

WHEREAS, in 1992 the Board adopted section 2291.1 of Title 13, California Code of Regulations, which establishes standards for M100 fuel methanol intended for use in motor vehicles in California;

WHEREAS, section 2291.1 provides that M100 fuel methanol intended for use in motor vehicles in California must produce a luminous flame, which is visible under maximum daylight conditions, throughout the entire burn duration; since an acceptable flame luminosity additive was not available when the

Board adopted section 2291.1, the Board postponed applicability of the luminosity requirement until January 1, 1995;

WHEREAS, the Board adopted the luminosity requirement to address the potential safety hazard that methanol fires may not be immediately noticed because pure methanol burns without a readily visible flame under daylight conditions;

WHEREAS, although several test programs have recently been initiated to investigate potential flame luminosity additives for M100 fuel, no additive is currently available which would satisfy the luminosity requirements of M100 fuel without sacrificing emissions performance;

WHEREAS, the staff has proposed an amendment to section 2291.1 which would exempt M100 fuel from the luminosity requirement where the person selling, supplying, or using the fuel demonstrates that it will be used as a motor vehicle fuel only in vehicles that are equipped with a system for automatically detecting and suppressing on-board fires or a system for on-board luminosity enhancement;

WHEREAS, the California Environmental Quality Act and Board regulations require that an action not be adopted as proposed where it will have significant adverse environmental impacts if feasible alternatives or mitigation measures are available which would substantially reduce or avoid such impacts;

WHEREAS, the Board has considered the impact of the proposed amendments on the economy of the state;

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

WHEREAS, the Board finds that:

M100 is a desirable alternative fuel for motor vehicles because it promotes energy diversity and because engines that are optimized for M100 have the potential to achieve low exhaust emissions; M100 is particularly suited to use in heavy-duty vehicles and equipment because of the potential to reduce particulate emissions compared to diesel engines;

There are currently about 380 motor vehicles operating on M100 fuel in California, almost all of which are transit or school buses equipped with automatic fire-suppression systems;

As amended herein, the ARB's M100 fuel standards will continue to address the potential safety concerns associated with the flame characteristics of M100 fires while assuring

that M100 can continue to be generally available to operators of M100-fueled vehicles in California; and

The amendments adopted herein will not result in a significant adverse environmental impact.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby amends section 2291.1, Title 13, California Code of Regulations, as set forth in Attachment A hereto.

I hereby certify that the above is a true and correct copy of Resolution 94-68 as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

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JUL 28 1995

RESOURCES AGENCY OF CALIFORNIA

STATE OF CALIFORNIA-CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
PETE WILSON, Governor

AIR RESOURCES BOARD
2020 L STREET
P.O. BOX 2815
SACRAMENTO, CA 95812

State of California
Environmental Protection Agency
AIR RESOURCES BOARD

Notice of Decision and
Response to Significant Environmental Issues

Item: NOTICE OF PUBLIC HEARING TO CONSIDER DELAYING IMPLEMENTATION OF THE PERIODIC SMOKE SELF-INSPECTION PROGRAM FOR HEAVY-DUTY DIESEL-POWERED VEHICLE FLEETS

Approved by: Resolution 94-69

Adopted by: Executive Order G-95-68
Dated: October 4, 1995

Agenda Item No: 94-12-4

Public Hearing Date: December 9, 1994

Issuing Authority: Air Resources Board

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

Response: N/A

Certified: _____
Artavia M. Edwards
Regulations Coordinator

Date: October 5, 1995

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OCT 17 1995
RESOURCES AGENCY OF CALIFORNIA

State of California
AIR RESOURCES BOARD

Resolution 94-69

December 9, 1994

Agenda Item No.: 94-12-4

WHEREAS, Sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (the "Board" or "ARB") 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, in Section 43000 of the Health and Safety Code, the Legislature has declared that the emission of air pollutants from motor vehicles is the primary cause of air pollution in many parts of the state and, in Sections 39002 and 39003 of the Health and Safety Code, has charged the Board with the responsibility of systematically attacking the serious air pollution problem caused by motor vehicles;

WHEREAS, in Section 43000.5 of the Health and Safety Code, the Legislature has declared that the burden for achieving needed reductions in vehicle emissions should be distributed equitably among various classes of vehicles, including heavy-duty vehicles, to achieve improvements in both the emissions levels and in-use performance;

WHEREAS, Section 43013 of the Health and Safety Code authorizes the Board to adopt motor vehicle emission standards and in-use performance standards which it finds to be necessary, cost-effective, and technologically feasible;

WHEREAS, Section 43018 of the Health and Safety Code directs the Board to endeavor to achieve the maximum degree of emission reduction from vehicular sources to accomplish the attainment of state ambient air quality standards by the earliest practicable date;

WHEREAS, the Legislature in 1988 enacted Section 44011.6 of the Health and Safety Code which directed the Board to develop a test procedure for the detection of excessive smoke emissions from heavy-duty diesel motor vehicles;

WHEREAS, Section 44011.6 of the Health and Safety Code further directed the Board to prohibit by regulation the use of heavy-duty motor vehicles which are determined to have excessive smoke emissions or other emissions-related defects and to commence inspecting heavy-duty motor vehicles;

WHEREAS, pursuant to Section 44011.6 of the Health and Safety Code, the Board in November 1990 adopted Sections 2180 through 2187, Title 13, California Code of Regulations, which implemented the test procedure for the detection of excessive smoke emissions from heavy-duty diesel motor vehicles

and which established the roadside smoke and emission control system inspection program for in-use heavy-duty diesel and gasoline-powered vehicles (the "roadside smoke inspection program");

WHEREAS, in Section 43700(d) of the Health and Safety code, the Legislature has declared that a reduction of emissions from diesel-powered vehicles, to the maximum extent feasible, is in the best interests of air quality and public health;

WHEREAS, the Legislature in 1990 enacted Section 43701(a) of the Health and Safety Code, mandating that the Board adopt regulations which require that owners or operators of heavy-duty diesel motor vehicles perform regular inspections of their vehicles for excessive emissions of smoke (a "periodic smoke inspection program");

WHEREAS, Section 43701(a) of the Health and Safety Code requires that the Board, in adopting the periodic smoke inspection program regulations, specify the inspection procedure, the frequency of inspections, the emission standards for smoke, and the actions the heavy-duty diesel motor vehicle owner or operator is required to take to remedy excessive smoke emissions;

WHEREAS, pursuant to Section 43701(a) of the Health and Safety Code, on December 10, 1992 the Board adopted Sections 2190 through 2194, Title 13, California Code of Regulations, to establish a periodic smoke self-inspection program for heavy-duty diesel-powered vehicle fleets;

WHEREAS, on December 10, 1992, the Board recognizing that new and alternative technologies are under development for the measurement and recording of heavy-duty diesel vehicle smoke emissions (i.e., analog to digital output and sampling methodology) established a regulation implementation date of January 1, 1995;

WHEREAS, on December 9, 1994, the staff proposed adoption of amendments to Title 13, CCR, Section 2190, which would delay general implementation of the regulation from January 1, 1995 to July 1, 1996;

WHEREAS, staff proposed an effective date of July 1, 1996 for the periodic smoke inspection program to allow additional time for the development and publication of a revised opacity meter sampling methodology for the snap-idle test by the Society of Automotive Engineers (SAE);

WHEREAS, staff also recommended delaying the effective date of the regulation to allow the ARB time to evaluate the SAE approved test method, to adopt the SAE recommendations into regulations, and to allow time for opacity meters meeting the SAE recommendations to be available for purchase;

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

WHEREAS, the Board has considered the impact of the proposed regulatory action on the economy of the state; and

WHEREAS, the Board finds that:

Excessive smoke emissions from heavy-duty diesel-powered motor vehicles contribute significantly to the serious air pollution problem in this state;

Particulates from the excessive smoke emissions of heavy-duty diesel-powered motor vehicles are a significant source of air contaminants;

Attainment of the state ambient air quality standards cannot be accomplished by the earliest practicable date without the reduction of excessive emissions from heavy-duty diesel-powered vehicles;

While the roadside smoke inspection program has been effective in reducing excessive smoke emissions from heavy-duty diesel-powered vehicles, additional action was required to further reduce excessive smoke emissions from heavy-duty diesel-powered vehicles;

The periodic smoke inspection program complements the existing roadside smoke inspection program and further reduce excessive smoke emissions from heavy-duty diesel-powered vehicles;

The periodic smoke inspection program regulations were adopted in December 1992 in order to fulfill the mandate for Health and Safety Code Section 43701(a);

The periodic smoke inspection program applies generally to heavy-duty diesel-powered vehicles with gross vehicle weight ratings of 6,001 pounds or more which operate on the streets or highways within the State of California, excluding only those heavy-duty diesel-powered vehicles which are not part of a fleet of two or more vehicles, which are not based in California, or which operate in California under short-term vehicle registrations or permits;

It is necessary and appropriate that the periodic smoke inspection program regulations utilize the smoke emission test procedures and smoke opacity standards which were developed and adopted for the roadside smoke inspection program, thereby applying consistent test procedures and standards for the two programs;

It is necessary and appropriate to begin the periodic smoke inspection program on January 1, 1996 to allow for additional time for the completion of a revised opacity meter sampling methodology for heavy-duty diesel vehicles by the SAE; to

allow additional time for the ARB to evaluate the test method and the test instrumentation specifications; to allow time for the ARB to adopt the SAE recommendations into regulations and to allow time for opacity meters meeting the SAE recommendations to be made available for purchase;

It is necessary and appropriate to increase the test implementation schedule, required by the regulation, by 90 days to allow equipment manufacturers sufficient time to market complying smoke meters;

WHEREAS, the Board further finds that:

The amendments approved herein will result in a significant adverse environmental impact in that a 12-month delay in implementing the Periodic Smoke Inspection program will result in a loss of program emission benefits of 2920 tons of PM, 2190 tons of HC, and 1825 tons of NOx;

The loss of emission benefits will be only a temporary short-term loss of the benefits for all three pollutants during the 12-month delay before the program begins operation on January 1, 1996;

The ARB has investigated whether there are any feasible mitigation measures or alternatives that would lessen or eliminate the significant adverse emissions impact of the amendment approved herein, and has not identified any such mitigation measures or alternatives which would allow the periodic smoke inspection program to begin on January 1, 1995 without a significant negative economic impact;

The negative economic impact of the "two meter" program of an approximately $20 million expenditure by industry substantially overrides the negative environmental impact of the "one meter" delayed program alternative;

NOW THEREFORE BE IT RESOLVED that the Board hereby approves the amendments to Title 13 California Code of Regulations sections 2190 and 2193, as set forth in Attachment A hereto.

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Office of the Secretary

OCT 17 1995

RESOURCES AGENCY OF CALIFORNIA

I hereby certify that the above is a true and correct copy of Resolution 94-69, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California
AIR RESOURCES BOARD

Executive Order G-95-68

WHEREAS, on December 9, 1994, the Air Resources Board (the "Board") conducted a public hearing to consider delaying implementation of the periodic smoke self-inspection program for heavy-duty diesel-powered vehicle fleets;

WHEREAS, following the public hearing, the Board adopted Resolution 94-69, in which the Board approved amendments to sections 2190 and 2193, Title 13, California Code of Regulations, as set forth in Attachment A thereto;

WHEREAS, the Board directed the Executive Officer to adopt the regulations, after making them available to the public for 15 days, provided that the Executive Officer shall consider such written comments regarding the changes in the regulation, as originally proposed as may be submitted during this period, shall make such modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration, if he determines that this is warranted;

WHEREAS, the approved regulations were available for public comment for a period of 15 days in accordance with the provisions of Title 1, California Code of Regulations, section 44, with the changes to the originally proposed text clearly indicted; and

WHEREAS, the written comments received during this 15-day comment period hve been considered by the Executive Officer and do not require modification nor reconsideration by the Board of the approved regulations.

NOW, THEREFORE, IT IS ORDERED that the recitals and findings contained in Resolution 94-69 are incorporated herein.

IT IS FURTHER ORDERED that sections 2190 and 2193, Title 13, California Code of Regulations, are hereby amended, as set forth in Attachment A hereto.

Executed this 4th day of October, 1995, at Sacramento, California.

James D. Boyd
Executive Officer

Attachment

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OCT 17 1995

RESOURCES AGENCY OF CALIFORNIA

State of California

AIR RESOURCES BOARD

Resolution 94-70
December 8, 1994

Agenda Item No.: 94-12-5

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, an interagency research proposal, Number 2165-184R, entitled "Evaluation and Demonstration of Wet Cleaning Alternatives to Perchloroethylene-Based Garment Care", has been submitted by the University of California, Los Angeles; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2165-184R, entitled "Evaluation and Demonstration of Wet Cleaning Alternatives to Perchloroethylene-Based Garment Care", submitted by the University of California, Los Angeles, for a total amount not to exceed $80,000.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2165-184R, entitled "Evaluation and Demonstration of Wet Cleaning Alternatives to Perchloroethylene-Based Garment Care", submitted by the University of California, Los Angeles, for a total amount not to exceed $80,000.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $80,000.

I hereby certify that the above is a true and correct copy of Resolution 94-70, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

Air Resources Board

Resolution 94-71
December 8, 1994

Agenda Item No.: 94-12-5

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, a solicited research proposal, Number 2114-178, entitled "Demonstration of a Low-Emitting Two-Stroke Utility Engine", has been submitted by Engine, Fuel and Emissions Engineering, Inc.

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2114-178, entitled "Demonstration of a Low-Emitting Two-Stroke Utility Engine", submitted by Engine, Fuel and Emissions Engineering, Inc., for an amount not to exceed $299,965.

NOW, THEREFORE BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by the Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2114-178, entitled "Demonstration of a Low-Emitting Two-Stroke Utility Engine", submitted by Engine, Fuel and Emissions Engineering, Inc., for an amount not to exceed $299,965.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort herein in an amount not to exceed $299,965.

I hereby certify that the above is a true and correct copy of Resolution 94-71, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-72
December 8, 1994

Agenda Item No.: 94-12-5

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, a solicited research proposal, Number 2171-186, entitled "Monitoring in Ozone Transport Corridors", has been submitted by Technical & Business Systems, Inc.; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2171-186, entitled "Monitoring in Ozone Transport Corridors", submitted by Technical & Business Systems, Inc., for a total amount not to exceed $367,070.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2171-186, entitled "Monitoring in Ozone Transport Corridors", submitted by Technical & Business Systems, Inc., for a total amount not to exceed $367,070.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $367,070.

I hereby certify that the above is a true and correct copy of Resolution 94-72, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

State of California

AIR RESOURCES BOARD

Resolution 94-73
December 8, 1994

Agenda Item No.: 94-12-5

WHEREAS, the Air Resources Board has been directed to carry out an effective research program in conjunction with its efforts to combat air pollution, pursuant to Health and Safety Code Sections 39700 through 39705; and

WHEREAS, a solicited research proposal, Number 2175-186 entitled "Analysis of the Southern California Wind Profiler and Aircraft Data", has been submitted by Systems Applications International; and

WHEREAS, the Research Division staff has reviewed and recommended this proposal for approval; and

WHEREAS, the Research Screening Committee has reviewed and recommends for funding:

> Proposal Number 2175-186, entitled "Analysis of the Southern California Wind Profiler and Aircraft Data", submitted by Systems Applications International, for a total amount not to exceed $142,771.

NOW, THEREFORE, BE IT RESOLVED, that the Air Resources Board, pursuant to the authority granted by Health and Safety Code Section 39703, hereby accepts the recommendation of the Research Screening Committee and approves the following:

> Proposal Number 2175-186, entitled "Analysis of the Southern California Wind Profiler and Aircraft Data", submitted by Systems Applications International, for a total amount not to exceed $142,771.

BE IT FURTHER RESOLVED, that the Executive Officer is hereby authorized to initiate administrative procedures and execute all necessary documents and contracts for the research effort proposed herein in an amount not to exceed $142,771.

I hereby certify that the above is a true and correct copy of Resolution 94-73, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary