

LOCATION:

South Coast Air Quality Management District
Auditorium
21865 E. Copley Drive
Diamond Bar, California 91765-4182

PUBLIC MEETING AGENDA

December 6, 2012

This facility is accessible by public transit. For transit information, call: (800) 743-3463, <http://www.foothilltransit.org/> (This facility is accessible to persons with disabilities.)

TO SUBMIT WRITTEN COMMENTS ON AN AGENDA ITEM IN ADVANCE OF THE MEETING GO TO: <http://www.arb.ca.gov/lispub/comm/bclist.php>

December 6, 2012

9:00 a.m.

CONSENT CALENDAR:

The following item(s) on the consent calendar will be voted on by the Board immediately after the start of the public meeting, unless removed from the consent calendar either upon a Board member's request or if someone in the audience wishes to speak on it. Attached are the Proposed Resolution(s) the Board will consider for consent item(s) listed below. Any attachment(s) to the resolutions are located at <http://www.arb.ca.gov/board/ma/2012/ma120612.htm>

Consent Item #

12-9-1: Public Hearing to Consider the Approval of the San Diego 8-Hour Ozone State Implementation Plan Redesignation Request and Maintenance Plan

Staff will present to the Board the San Diego Air Pollution Control District's Redesignation Request and Maintenance Plan for the 1997 8-hour Ozone National Ambient Air Quality Standard. The District demonstrates that San Diego County now meets the standard and qualifies for redesignation to attainment.

12-9-2: PM2.5 Emissions Inventory Submittal for the San Francisco Bay Area to Meet State Implementation Plan Requirements for Clean Data Areas

Staff will present to the Board the PM2.5 emissions inventory for the San Francisco Bay Area PM2.5 nonattainment area. This area now meets the revised federal 24-hour PM2.5 standard. The emissions inventory fulfills the State Implementation Plan requirements for clean data areas.

DISCUSSION ITEMS:

Note: The following agenda items may be heard in a different order at the Board meeting.

Agenda Item #

12-9-3: Research Update

Staff from the Research Division will provide an update of recent research highlights.

12-9-4: Public Meeting to Consider 10 Research Proposals

Staff will present ten research proposals to the Board that were developed based on the Board-approved FY 2012-2013 Annual Research Plan.

- 1) "Measuring Real-World Emissions from the On-Road Heavy-Duty Truck Fleet," University of California, Berkeley, \$450,000, Proposal No. 2745-275.
- 2) "Evaluating the Benefits of Light Rail Transit," University of California, Irvine, \$200,000, Proposal No. 2746-275.
- 3) "Economic and Operational Considerations in Transitioning to a Zero or Near-Zero Emission Rail System in California," University of Illinois, \$399,888, Proposal No. 2747-275.
- 4) "Life Cycle Assessment and Co-Benefits of Cool Pavements," Lawrence Berkeley National Laboratory, \$550,000, Proposal No. 2748-275.
- 5) "Improving Detection of Particulate Matter Emissions for Certification of Advanced Clean Cars (CRC Project E-99, 'Very Low PM Measurements')," University of California, Riverside, \$100,000, Proposal No. 2749-275.
- 6) "Improving Chemical Mechanisms for Ozone and Secondary Organic Carbon," University of California, Davis, \$450,024, Proposal No. 2751-275.
- 7) "Advanced Plug-in Electric Vehicle Travel and Charging Behavior," University of California, Davis, \$650,000, Proposal No. 2753-275.
- 8) "New Car Buyers' Valuation of Zero-Emission Vehicles," University of California, Davis, \$282,739, Proposal No. 2744-275.
- 9) "Identifying Urban Designs and Traffic Management Strategies that Reduce Air Pollution Exposure," University of California, Los Angeles, \$388,001, Proposal No. 2754-275.
- 10) "Measuring Real-World Emissions from the On-Road Passenger Fleet," University of Denver, Colorado, \$75,000, Proposal No. 2755-275.

12-9-5: AB 32 Update

Staff will update the Board on activities to implement AB 32, including results of the November auction to implement the Cap and Trade Regulation, and development of the 2013 Update to the Scoping Plan.

12-9-6: 2012 Haagen-Smit Clean Air Awards

The recipients of the 2012 Haagen-Smit Clean Air Awards will be announced. The Board annually presents the Haagen-Smit Clean Air Awards to esteemed persons in the air quality community – scientists, legislators, professors, activists, business leaders, and others who have made significant contributions toward improving air quality and public health.

CLOSED SESSION

The Board will hold a closed session, as authorized by Government Code section 11126(e), to confer with, and receive advice from, its legal counsel regarding the following pending or potential litigation:

POET, LLC, et al. v. Goldstene, et al., Superior Court of California (Fresno County), Case No. 09CECG04850; plaintiffs' appeal, Court of Appeal No. F064045.

Rocky Mountain Farmers Union, et al. v. Goldstene, U.S. District Court (E.D. Cal. Fresno), Case No. 1:09-CV-02234-LJO-DLB; interlocutory appeal, U.S. Court of Appeal, Ninth Circuit Nos. 09-CV-02234 and 10-CV-00163.

American Fuels and Petrochemical Manufacturing Associations, et al. v. Goldstene, et al., U.S. District Court (E.D. Cal. Fresno) Case No. 1:10-CV-00163-AWI-GSA; interlocutory appeal, U.S. Court of Appeal, Ninth Circuit Nos. 09-CV-02234 and 10-CV-00163.

Association of Irrigated Residents, et al. v. U.S. E.P.A., 2011 WL 310357 (C.A.9), (Feb. 2, 2011).

California Dump Truck Owners Association v. California Air Resources Board, U.S. District Court (E.D. Cal. Sacramento) Case No. 2:11-CV-00384-MCE-GGH.

Engine Manufacturers Association v. California Air Resources Board, Sacramento Superior Court, Case No. 34-2010-00082774.

Citizens Climate Lobby and Our Children's Earth Foundation v. California Air Resources Board, San Francisco Superior Court, Case No. CGC-12-519554.

California Chamber of Commerce et al. v. California Air Resources Board et al., Sacramento Superior Court, Case No. 34-2012-80001313.

OPPORTUNITY FOR MEMBERS OF THE BOARD TO COMMENT ON MATTERS OF INTEREST

Board members may identify matters they would like to have noticed for consideration at future meetings and comment on topics of interest; no formal action on these topics will be taken without further notice.

OPEN SESSION TO PROVIDE AN OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO ADDRESS THE BOARD ON SUBJECT MATTERS WITHIN THE JURISDICTION OF THE BOARD

Although no formal Board action may be taken, the Board is allowing an opportunity to interested members of the public to address the Board on items of interest that are within the Board's jurisdiction, but that do not specifically appear on the agenda. Each person will be allowed a maximum of three minutes to ensure that everyone has a chance to speak.

**TO SUBMIT WRITTEN COMMENTS ON AN AGENDA ITEM IN ADVANCE OF THE MEETING
GO TO:**

<http://www.arb.ca.gov/lispub/comm/bclist.php>

ONLINE SIGN-UP:

You can sign up online in advance to speak at the Board meeting when you submit an electronic Board item comment. For more information go to:

<http://www.arb.ca.gov/board/online-signup.htm>

IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT THE CLERK OF THE BOARD:

1001 I Street, 23rd Floor, Sacramento, California 95814

(916) 322-5594

ARB Homepage: www.arb.ca.gov

SPECIAL ACCOMMODATION REQUEST

Special accommodation or language needs can be provided for any of the following:

- An interpreter to be available at the hearing;
- Documents made available in an alternate format or another language;
- A disability-related reasonable accommodation.

To request these special accommodations or language needs, please contact the Clerk of the Board at (916) 322-5594 or by facsimile at (916) 322-3928 as soon as possible, but no later than 7 business days before the scheduled Board hearing. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Comodidad especial o necesidad de otro idioma puede ser proveído para alguna de las siguientes:

- Un intérprete que esté disponible en la audiencia.
- Documentos disponibles en un formato alterno u otro idioma;
- Una acomodación razonable relacionados con una incapacidad.

Para solicitar estas comodidades especiales o necesidades de otro idioma, por favor llame a la oficina del Consejo al (916) 322-5594 o envíe un fax a (916) 322-3928 lo más pronto posible, pero no menos de 7 días de trabajo antes del día programado para la audiencia del Consejo. TTY/TDD/Personas que necesiten este servicio pueden marcar el 711 para el Servicio de Retransmisión de Mensajes de California.

SMOKING IS NOT PERMITTED AT MEETINGS OF THE CALIFORNIA AIR RESOURCES BOARD

PUBLIC MEETING AGENDA

LOCATION:

South Coast Air Quality Management District
Auditorium
21865 E. Copley Drive
Diamond Bar, California 91765-4182

INDEX

This facility is accessible by public transit. For transit information, call: (800) 743-3463, <http://www.foothilltransit.org/> (This facility is accessible to persons with disabilities.)

December 6, 2012

<u>Agenda #</u>		<u>Pages</u>
12-9-1	Public Hearing to Consider the Approval of the San Diego 8-Hour Ozone State Implementation Plan Redesignation Request and Maintenance Plan	1-24
12-9-2	PM2.5 Emissions Inventory Submittal for the San Francisco Bay Area to Meet State Implementation Plan Requirements for Clean Data Areas	25-38
12-9-3	Research Update	---
12-9-4	Public Meeting to Consider 10 Research Proposals	---
12-9-5	AB 32 Update	---
12-9-6	2012 Haagen-Smit Clean Air Awards	39-46

CALIFORNIA AIR RESOURCES BOARD

NOTICE OF PUBLIC MEETING TO CONSIDER THE APPROVAL OF THE SAN DIEGO 8-HOUR OZONE REDESIGNATION REQUEST AND MAINTENANCE PLAN

The Air Resources Board (ARB or Board) will conduct a public meeting at the time and place noted below to consider approval of the Ozone SIP - Redesignation Request and Maintenance Plan for the 1997 8-Hour National Ozone Standard for San Diego County. If adopted, ARB will submit these elements to the U.S. Environmental Planning Agency (U.S. EPA) for approval as a revision to the California State Implementation Plan.

DATE: December 6, 2012
TIME: 9:00 a.m.
PLACE: South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, California 91765

This item will be considered at a one-day meeting of the Board, which will commence at 9:00 a.m., Thursday, December 6, 2012. This item is scheduled to be heard on the Board's consent calendar. All items on the consent calendar will be voted on by the Board immediately after the start of the public meeting. Any item may be removed from the consent calendar at the request of a Board member or if someone in the audience would like to speak on that item.

BACKGROUND

The federal Clean Air Act (Act) establishes planning requirements for those areas that routinely exceed a health-based National Ambient Air Quality Standards (NAAQS). On June 13, 2012, U.S. EPA classified San Diego as a "Moderate" nonattainment area for the 1997 8-hour Ozone NAAQS, requiring a State Implementation Plan (SIP) addressing Moderate area control requirements to be submitted to U.S. EPA by June 13, 2013. The San Diego Air Pollution Control District's (District) 2012 Redesignation Request and Maintenance Plan (Maintenance Plan) demonstrates that the region's air quality now meets the NAAQS, and that it will continue to do so through at least 2025. If U.S. EPA approves the Maintenance Plan, the Maintenance Plan will fulfill all applicable SIP requirements for the 1997 standard.

PROPOSED ACTION

ARB staff has reviewed the Maintenance Plan as proposed by the District staff on November 2, 2012, and finds that the Maintenance Plan meets all requirements of the Act for redesignation requests and maintenance plans and demonstrates that ozone

levels in the San Diego area will continue to meet the 1997 8-hour ozone standard. The redesignation request and maintenance plan provisions comply with Sections 107(d)(3)(E) and 175A, respectively, of the Act. Staff recommends that the Board approve the Maintenance Plan contingent on ARB staff's determination that the Maintenance Plan approved by the District Board does not differ significantly from that reviewed by ARB staff, and that the Board direct staff to submit the Maintenance Plan to U.S. EPA as a proposed revision to California's SIP.

AVAILABILITY OF DOCUMENTS

ARB staff has prepared a written Staff Report. Copies of the Staff Report may be obtained from the ARB Public Information Office, Visitors and Environmental Services Center, 1001 I Street, First Floor, Sacramento, California, 95814, (916) 322-2990. This notice, the Staff Report, and the San Diego County Air Pollution Control District 2012 Redesignation Request and Maintenance Plan will be available from ARB's website at <http://www.arb.ca.gov/planning/sip/planarea/sansip.htm>

SUBMITTAL OF COMMENTS

Interested members of the public may also present comments orally or in writing at the meeting, and comments may be submitted by postal mail or by electronic submittal before the meeting. To be considered by the Board, written comments not physically submitted at the meeting must be received **no later than 12:00 noon on Wednesday, December 5, 2012**, and addressed to the following:

Postal mail: Clerk of the Board, Air Resources Board
1001 I Street, Sacramento, California 95814

Electronic submittal: <http://www.arb.ca.gov/lispub/comm/bclist.php>

You can sign up online in advance to speak at the Board meeting when you submit an electronic board item comment. For more information go to: <http://www.arb.ca.gov/board/online-signup.htm>.

Please note that under the California Public Records Act (Gov. Code, § 6250 et seq.), your written and oral comments, attachments, and associated contact information (e.g., your address, phone, email, etc.) become part of the public record and can be released to the public upon request.

ARB requests that written and email statements on this item be filed at least 10 days prior to the meeting so that ARB staff and Board members have additional time to consider each comment. Further inquiries regarding this matter should be directed to Ms. Sylvia Oey, Manager of the Southern California State Implementation Plan Section, Planning and Technical Support Division, at (916) 322-8279, or Ms. Monica Lewis, Air

Pollution Specialist, Southern California State Implementation Plan Section, Planning and Technical Support Division, at (916) 324-2716.

SPECIAL ACCOMMODATION REQUEST

Special accommodation or language needs can be provided for any of the following:

- An interpreter to be available at the hearing;
- Documents made available in an alternate format or another language; or
- A disability-related reasonable accommodation.

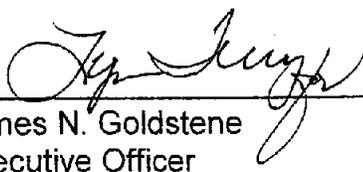
To request these special accommodations or language needs, please contact the Clerk of the Board at (916) 322-5594 or by facsimile at (916) 322-3928 as soon as possible, but no later than 10 business days before the scheduled Board hearing. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Comodidad especial o necesidad de otro idioma puede ser proveído para alguna de las siguientes:

- Un intérprete que esté disponible en la audiencia.
- Documentos disponibles en un formato alterno u otro idioma.
- Una acomodación razonable relacionados con una incapacidad.

Para solicitar estas comodidades especiales o necesidades de otro idioma, por favor llame a la oficina del Consejo al (916) 322-5594 o envíe un fax a (916) 322-3928 lo más pronto posible, pero no menos de 10 días de trabajo antes del día programado para la audiencia del Consejo. TTY/TDD/Personas que necesiten este servicio pueden marcar el 711 para el Servicio de Retransmisión de Mensajes de California.

CALIFORNIA AIR RESOURCES BOARD



James N. Goldstene
Executive Officer

Date: 11/14/12

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at www.arb.ca.gov.

STATE OF CALIFORNIA

California Environmental Protection Agency

 **Air Resources Board**

STAFF REPORT

**ANALYSIS OF THE
SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT
2012 REDESIGNATION REQUEST AND MAINTENANCE PLAN
FOR THE 1997 NATIONAL OZONE STANDARD**

Date of Release: November 23, 2012
Scheduled for Consideration: December 6, 2012

This report has been reviewed by the staff of the California Air Resources Board and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the Air Resources Board, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

TABLE OF CONTENTS

I. EXECUTIVE SUMMARY.....	3
II. REDESIGNATION REQUIREMENTS.....	3
III. EVALUATION OF THE SAN DIEGO OZONE PLAN.....	4
A. San Diego County Attains the Ozone Standard.....	4
B. The State Has Met Applicable Act Requirements.....	5
C. Improvement in San Diego Ozone Air Quality is Due to Permanent and Enforceable Reductions in Emissions.....	6
D. Maintenance Plan	
1. Attainment Emission Inventory.....	6
2. Maintenance Demonstration.....	6
3. Ozone Monitoring Network.....	7
4. Verification of Continued Attainment.....	7
5. Contingency Provisions.....	7
6. Transportation Conformity Budgets.....	8
IV. STAFF RECOMMENDATION.....	8

I. EXECUTIVE SUMMARY

On June 13, 2012, the U.S. Environmental Protection Agency (U.S. EPA) classified San Diego as a "Moderate" nonattainment area for the 1997 8-Hour Ozone National Ambient Air Quality Standard (standard), requiring a State Implementation Plan (SIP) addressing Moderate area control requirements to be submitted to U.S. EPA by June 13, 2013. The classification, which was made in response to a court order, was based on 2001 to 2003 air quality data. However, more recent data show that San Diego attained the standard in 2011. The San Diego Air Pollution Control District's (District) 2012 Redesignation Request and Maintenance Plan (Maintenance Plan) demonstrates that the region's air quality now meets the federal standard, and that it will continue to do so through at least 2025. If approved by U.S. EPA, the Maintenance Plan will fulfill all applicable SIP requirements for the 1997 8-Hour Ozone Standard.

The District's Governing Board is scheduled to consider adoption of the Maintenance Plan on December 5, 2012. ARB staff has reviewed the Draft Maintenance Plan released on November 2, 2012 and finds that the Maintenance Plan meets all applicable federal Clean Air Act (CAA) requirements for redesignation requests and maintenance plans. Staff recommends that the Board approve the Maintenance Plan contingent on ARB staff's determination that the Maintenance Plan approved by the District Board does not differ significantly from that reviewed by ARB staff, and that the Board direct staff to submit the Maintenance Plan to U.S. EPA as a proposed revision to California's SIP.

II. REDESIGNATION REQUIREMENTS

ARB staff reviewed the Maintenance Plan within the context of the CAA, which identifies the following requirements that a nonattainment area must meet in order to be redesignated to attainment:

- Attainment of the standard has been demonstrated;
- The State has met all applicable CAA requirements for ozone in the nonattainment area;
- The area has an approved SIP;
- The area's improvement in air quality is due to permanent and enforceable ozone emission reductions; and
- The area has a U.S. EPA-approved maintenance plan.

The CAA also sets the general framework for maintenance plans. Each ozone maintenance plan must provide for continued maintenance of the ozone standard for 10 years after redesignation, and must include the following components:

- A detailed emissions inventory;
- A maintenance demonstration;
- A commitment to continue operation of the monitoring network;

- A commitment to verify continued attainment; and
- A contingency plan to promptly correct any violation of the standard that occurs after redesignation.

III. EVALUATION OF THE SAN DIEGO PLAN

Based on review of the Maintenance Plan and the District's supporting technical analysis, ARB staff concurs that the Maintenance Plan meets the CAA requirements. The following sections describe the major elements of the Maintenance Plan.

A. Redesignation Request: San Diego Attains the 1997 8-hour Ozone Standard

The San Diego District operates an extensive ozone monitoring network that continuously monitors ambient ozone levels at numerous sites throughout San Diego County in compliance with federal requirements. The data generated at these monitors are used to define the nature and severity of ozone pollution in San Diego County, to identify ozone pollution trends, and to determine compliance with ozone air quality standards.

Data from the San Diego monitoring network show that the area attained the 1997 8-hour ozone standard, which is 0.08 parts per million (ppm), in 2011. Figure 1 maps the ozone monitors operating in the nonattainment area during the 2009 through 2011 attainment period. Table 1 shows the fourth-highest daily maximum 8-hour average ozone concentration recorded at each monitoring site in each of the past three consecutive years. U.S. EPA regulations specify that the three-year average of the fourth-highest daily concentrations recorded at each site must be used to determine whether a region attains the standard. The highest resulting averaged value is known as the ozone "design value" for the region; the 1997 8-hour ozone standard is attained when a region's design value is less than or equal to 0.084 ppm. Table 1 shows that San Diego County's ozone design value is 0.082 ppm. San Diego's design value is established at the Alpine monitoring station, which has historically recorded the highest ozone concentrations in the region. As shown in Table 1, the 1997 8-hour ozone standard has been attained throughout the San Diego County Planning Area.

Data from the 2012 ozone season have not yet been fully reviewed. Preliminary data indicate that the area continues to be in attainment of the 1997 ozone standard to date.

Figure 1. Ozone Monitoring Stations in San Diego County



Table 1. San Diego County Ozone Data: Annual Fourth-Highest Daily Maximum Concentrations (ppm)

Monitor Site	2009	2010	2011	3-Year Average
Alpine	0.085	0.081	0.082	0.082
Camp Pendleton	0.071	0.064	0.067	0.067
Chula Vista	0.067	0.068	0.055	0.063
Del Mar	0.067	0.063	0.064	0.064
Downtown	0.060	0.058	0.060	0.059
El Cajon	0.071	0.073	0.070	0.071
Escondido	0.074	0.075	0.068	0.072
Kearny Mesa	0.069	0.070	0.069	0.069
Otay Mesa	0.061	0.056	0.059	0.058

B. The State Has Met Applicable Clean Air Act Requirements

ARB and the District have met all of the CAA requirements applicable for a Moderate ozone nonattainment area to be considered for redesignation. U.S. EPA fully approved San Diego's 1-hour Ozone Maintenance Plan on July 28, 2003; this plan remains the applicable ozone SIP for San Diego until U.S. EPA approves a subsequent ozone SIP submittal (San Diego's 2012 Redesignation Request and Maintenance Plan). No SIP provisions are currently disapproved, conditionally approved, or partially approved.

C. Improvement in San Diego's Ozone Air Quality is Due to Permanent and Enforceable Reductions in Emissions

The Maintenance Plan projects that ozone precursor emissions will continue to decline through the maintenance period despite projected increases in population, motor vehicle use, meteorological fluctuations, and economic recovery. The benefits of the adopted rules and regulations are projected to continue through the maintenance period as older vehicles, engines, and equipment are replaced with newer units subject to more stringent emission control requirements. The Maintenance Plan also identifies the adopted State and local regulations that, together with federal controls, brought the area into attainment of the 1997 ozone standard.

D. Maintenance Plan

The Maintenance Plan also includes the components needed to demonstrate that the area will remain in attainment of the 1997 ozone standard: an attainment emission inventory that is projected to decline through 2025; a commitment to continue operation of the monitoring network; a commitment for verification of continued attainment; and a contingency plan.

1. Attainment Emission Inventory

Ozone is formed in the air by reactions of ozone precursor emissions, volatile organic compounds (VOC) and oxides of nitrogen (NOx), in the presence of sunlight and heat. Because San Diego attained the 8-hour ozone standard in 2011, total daily VOC and NOx emissions in 2011 represent the attainment inventory (see Table 2). The attainment inventory shows average total ozone precursor emissions of 142.6 tons per day (tpd) VOCs and 137.5 tpd NOx.

**Table 2. San Diego County 2011 Ozone Attainment Inventory
Summer Planning Inventory, tpd**

Precursor	Emissions
Volatile organic compounds (VOC)	142.6
Nitrogen oxides (NOx)	137.5

2. Maintenance Demonstration

In addition to the 2011 adjusted baseline inventory of ozone precursor emissions, the Maintenance Plan provides emission projections through the year 2025. These projections incorporate the effects of projected growth in population, vehicle travel, and economic activity, as well as the effects of adopted regulations. As shown in Table 3, emissions of ozone precursors will continue to decline through 2025.

Because potential changes in military activities do not follow socioeconomic factors, the District included a projection of future mobile source emissions from potential

additional military activity, obtained from the Department of the Navy, in its inventory projections. The projected inventory also includes banked emission reduction credits as a line item to demonstrate that the use of banked emissions credits will not interfere with maintenance.

Table 3. Emissions Trends

Emissions Source Category	2002	2011	2015	2020	2025
VOCs					
Stationary Sources	28.4	31.1	33.1	35.8	36.8
Areawide Sources	42.2	35.9	35.3	36.7	37.5
On-Road Motor Vehicles	63.4	35.3	26.4	20.5	18.3
Non-Road Mobile Sources	49.1	40.3	37.1	35.4	36.1
Banked Emission Credits			0.9	0.9	0.9
Potential Future Military Activity			1.0	1.0	1.0
Total VOCs	183.1	142.6	133.9	130.3	130.6
NOx					
Stationary Sources	8.2	6.3	5.6	5.5	5.6
Areawide Sources	1.9	1.7	1.8	1.9	2.0
On-Road Motor Vehicles	119.9	70.9	52.5	35.9	27.6
Non-Road Mobile Sources	68.0	58.6	54.9	50.4	47.5
Banked Emission Credits			0.7	0.7	0.7
Potential Future Military Activity			4.4	4.4	4.4
Total NOx	198.1	137.5	119.9	98.9	87.8

The declining inventory indicates that San Diego will maintain attainment of the 1997 ozone standard due to ARB, District, and federal control measures that are already in place.

3. Ozone Monitoring Network

San Diego County's nine-station ozone monitoring network substantially exceeds U.S. EPA requirements, which call for two ozone monitoring sites in an area of this size.

4. Verification of Continued Attainment

In the Maintenance Plan, the District commits to continue ozone monitoring to verify continued attainment of the 1997 ozone standard. The Maintenance Plan also includes a commitment to continue air monitoring data collection, verification, and submittal in compliance with federal guidelines.

5. Contingency Plan

The CAA requires that a maintenance plan include contingency provisions for prompt correction of any violation of an air quality standard that might occur after the area has been redesignated to attainment for that standard. U.S. EPA's

requirements specify that the area must have a plan ensures that contingency measures will be adopted if the area goes out of attainment.

The San Diego Maintenance Plan cites ARB mobile source control regulations that were not included in the emission projections as contingency measures that will provide significant continuing emissions reductions through the maintenance period. The Maintenance Plan also includes a District commitment to adopt and implement additional emission control measures needed to ensure maintenance if a violation of the 1997 ozone standard is recorded. ARB staff concurs that the Maintenance Plan meets CAA contingency plan requirements.

6. Transportation Conformity Budgets

The CAA's transportation conformity requirements are designed to ensure that transportation planning is consistent with air quality goals. Conformity is determined by comparing emissions from proposed projects and transportation system plans to the transportation conformity budgets established in the SIP.

The Maintenance Plan includes the transportation conformity budgets shown in Table 5. The San Diego Association of Governments and District staffs agreed to use the projected on-road motor vehicle inventories for 2020 and 2025, rounded up to the nearest ton and increased by two tons, to develop the transportation conformity budgets. These budgets provide room for economic recovery that exceeds current projections, but are still substantially lower than the 2011 on-road emissions levels that resulted in attainment of the 1997 ozone standard. If approved by the District Board in December 2012, these budgets will meet CAA requirements.

Table 5. Emissions Budgets for Transportation Conformity

Ozone Precursor	2020 (Interim Year)	2025 (Horizon) and Subsequent Years
VOC	23 tpd	21 tpd
NOx	38 tpd	30 tpd

IV. STAFF RECOMMENDATION

ARB staff has reviewed the Maintenance Plan for San Diego and consulted with District staff during this review. ARB staff finds that the Maintenance Plan meets all applicable CAA requirements. ARB staff believes that implementation of this Maintenance Plan will continue to maintain ozone levels below the 1997 8-hour ozone National Ambient Air Quality Standard in the San Diego County Planning Area. Therefore, staff recommends that the Board adopt the San Diego County 2012 Redesignation Request and Maintenance Plan as a revision to the California SIP for submittal to U.S. EPA. Staff further recommends that the Board approve the District's request that the San Diego County Planning Area be redesignated from nonattainment to attainment for the national ozone standard.

PROPOSED

State of California
AIR RESOURCES BOARD

**Approval of the San Diego 8-Hour Ozone SIP
Redesignation Request and Maintenance Plan**

Resolution 12-36

December 6, 2012

Agenda Item No.: 12-9-1

WHEREAS, the Legislature in Health and Safety Code section 39602 has designated the State Air Resources Board (ARB) as the air pollution control agency for all purposes set forth in federal law;

WHEREAS, ARB is responsible for preparing 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, sections 39602 and 40460 of the Health and Safety Code provide that the SIP shall include only those provisions necessary to meet the requirements of the Act;

WHEREAS, ARB has responsibility 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, ARB is authorized by section 39600 of the Health and Safety Code 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 power, duty, purpose, function, or jurisdiction of the Board may be delegated to the Board's Executive Officer as the Board deems appropriate;

WHEREAS, the local air districts have primary responsibility for the control of air pollution from non-vehicular sources and for adopting control measures, rules, and regulations to attain the NAAQS within their boundaries pursuant to sections 39002, 40000, 40001, 40701, 40702, and 41650 of the Health and Safety Code;

WHEREAS, the San Diego County Air Pollution Control District (District) was established, pursuant to sections 40000 and 40100 of the Health and Safety Code, as the air pollution control district responsible for carrying out these responsibilities in the San Diego County Planning Area;

WHEREAS, in 1997, the U.S. Environmental Protection Agency (U.S. EPA) promulgated an 8-hour NAAQS for ozone of less than 0.08 parts per million;

WHEREAS, in June 2012, the U.S. EPA designated the San Diego County Planning Area as a "moderate" ozone nonattainment area for the 1997 8-hour ozone standard (standard) with an attainment date of June 13, 2018;

WHEREAS, San Diego County measured no violations of the standard from 2009-2011, thereby qualifying for redesignation to attainment under U.S. EPA regulations;

WHEREAS, section 107(d)(3)(D) of the Act provides that a State may request that U.S. EPA redesignate an area from nonattainment to attainment for the NAAQS;

WHEREAS, section 107(d)(3)(E) of the Act sets forth the requirements which must be met for U.S. EPA to redesignate an area from nonattainment to attainment;

WHEREAS, the District developed the 2012 Redesignation Request and Maintenance Plan for the 1997 National Ozone Standard for San Diego County (Maintenance Plan) to address the requirements of the Act;

WHEREAS, the Maintenance Plan contains:

1. a detailed attainment emissions inventory;
2. a maintenance demonstration;
3. a commitment to continue operation of the monitoring network;
4. a contingency plan; and
5. transportation conformity budgets.

WHEREAS, section 41650 of the Health and Safety Code requires ARB to approve the nonattainment plan adopted by a district as part of the SIP unless the Board finds, after a public hearing, that the plan does not meet Act requirements;

WHEREAS, consistent with section 107(d)(3)(E)(i) of the Act, the District demonstrated attainment of the standard in the 2009-2011 period for the San Diego County Planning Area, based on quality-assured federal reference method monitoring data from the local monitoring network;

WHEREAS, consistent with section 107(d)(3)(E)(ii) of the Act, the District prepared the Maintenance Plan in part to meet the requirement for an approvable ozone SIP under section 110(k) of the Act;

WHEREAS, consistent with section 107(d)(3)(E)(iii) of the Act, the District demonstrated in the Maintenance Plan that improvement in air quality is due to permanent and enforceable emission control measures;

WHEREAS, consistent with section 107(d)(3)(E)(iv) of the Act, the Maintenance Plan meets the requirement of section 175A of the Act;

WHEREAS, consistent with section 107(d)(3)(E)(v) of the Act, the Maintenance Plan meets the requirement of section 110 and part D of the Act;

WHEREAS, consistent with section 176 of the Act, the District developed transportation conformity budgets for volatile organic compounds (VOC) and oxides of nitrogen (NOx) using the most recent estimates of emissions for 2012 and projections through 2025;

WHEREAS, the Maintenance Plan demonstrates that the emissions will continue to decline through 2025;

WHEREAS, federal law set forth in section 110(l) of the Act and Title 40, Code of Federal Regulations, section 51.102, requires that one or more public hearings, preceded by at least 30 days of notice and opportunity for public review, must be conducted prior to the adoption and submittal to the U.S. EPA of any SIP revision;

WHEREAS, as required by federal law, the District made the Maintenance Plan available for public review at least 30 days prior to the hearing date;

WHEREAS, following the December 5, 2012 public hearing, the District Board voted to:

1. adopt the Maintenance Plan to fulfill applicable requirements of the Act for a moderate ozone nonattainment area to be redesignated to attainment; and
2. request a redesignation for the San Diego Planning Area to attainment for the 1997 8-hour ozone standard.

WHEREAS, the District submitted the Maintenance Plan to ARB as a SIP revision in accordance with State and federal law;

WHEREAS, the District requested that the San Diego County 8-Hour Ozone Nonattainment Planning Area be redesignated from nonattainment to attainment with respect to the 1997 8-Hour Ozone NAAQS;

WHEREAS, the Board finds that:

1. California's air pollution control programs have successfully reduced ozone concentrations leading to attainment of the standard in San Diego County;
2. The Maintenance Plan meets all applicable planning requirements established by the Act and U.S. EPA regulations;
3. The Maintenance Plan is necessary for U.S. EPA to redesignate San Diego County to attainment for the ozone NAAQS;
4. The Maintenance Plan addresses current attainment and continued maintenance of the standard in San Diego County for at least ten years after redesignation;
5. Consistent with U.S. EPA guidance, the Maintenance Plan includes an attainment emissions inventory, commitments by the District to continual operation of the monitoring network, and a process to verify continued ozone standard attainment;
6. The Maintenance Plan includes contingency provisions to assure prompt correction of any post-designation violation of the ozone NAAQS;

7. The Maintenance Plan has identified county-level VOC and NOx emission budgets for transportation conformity for 2020 and 2025 based on current emissions and activity data, and the budgets are adequate to ensure continued maintenance of the NAAQS; and
8. The State, federal, and local control strategy identified in the Maintenance Plan provides the necessary emission reductions to maintain attainment of the standard through the maintenance period.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby adopts the 2012 "Redesignation Request and Maintenance Plan for the 1997 National Ozone Standard for San Diego County" as a revision to the California SIP.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to submit the Maintenance Plan as a SIP revision (together with the appropriate supporting documentation) to U.S. EPA for approval as a revision to the California SIP, to be effective, for purposes of federal law, upon approval by U.S. EPA.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to work with the District and U.S. EPA and take appropriate action to resolve any issues regarding plan completeness and approvability that may arise.

BE IT FURTHER RESOLVED that the Board authorizes the Executive Officer to include in the SIP submittal any technical corrections, clarifications, or additions that may be necessary to secure U.S. EPA approval.

BE IT FURTHER RESOLVED that the Board hereby certifies pursuant to 40 CFR section 51.102 that the proposed SIP revision was adopted after notice and public hearing as required by 40 CFR section 51.102.

CALIFORNIA AIR RESOURCES BOARD

NOTICE OF PUBLIC MEETING TO CONSIDER APPROVAL OF THE 2012 PM2.5 EMISSION INVENTORY SUBMITTAL TO THE STATE IMPLEMENTATION PLAN FOR THE SAN FRANCISCO BAY AREA

The Air Resources Board (ARB or Board) will conduct a public meeting at the time and place noted below to consider the proposed fine particulate matter (PM2.5) Emission Inventory State Implementation Plan (SIP) submittal for the San Francisco Bay Area that was developed and approved by the Bay Area Air Quality Management District (District). If approved, ARB will submit this submittal to the United States Environmental Protection Agency (U.S. EPA) for approval as a revision to the California SIP.

DATE: December 6, 2012

TIME: 9:00 a.m.

PLACE: South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, California 91765

This item may be considered at a two-day meeting of the Board, which will commence at 9:00 a.m., December 6, 2012, and may continue at 8:30 a.m., on December 7, 2012. This item is scheduled to be heard on the Board's Consent Calendar. All items on the consent calendar can be voted on by the Board immediately after the start of the public meeting. Any item may be removed from the consent calendar at the request of a Board member or if someone in the audience would like to speak on that item.

In December 2006, the U.S. EPA lowered the 24-hour standard for PM2.5 from $65 \mu\text{g}/\text{m}^3$ to $35 \mu\text{g}/\text{m}^3$. Effective December 14, 2009, the U.S. EPA designated the San Francisco Bay Area as nonattainment for this more stringent 24-hour PM2.5 standard. The federal Clean Air Act establishes planning requirements for such designated areas that exceed the health-based National Ambient Air Quality Standards (NAAQS). These nonattainment areas must develop and implement a SIP that demonstrates how they will attain the standards by specified dates. The SIP submittal deadline for the revised 24-hour PM2.5 standard is December 14, 2012.

However, under the U.S. EPA's *Clean Data Policy for the Fine Particulate National Ambient Air Quality Standards* (Clean Data Policy), nonattainment areas that attain the NAAQS prior to the SIP submittal deadline are eligible for reduced regulatory requirements.

Based on quality-assured federal reference method monitoring data for 2008-2010, the San Francisco Bay Area has demonstrated attainment of the 24-hour PM2.5 NAAQS for 2008-2010. The San Francisco Bay Area continues to attain based on the most recent

issue a clean data finding under the Clean Data Policy, suspending the majority of the planning elements under the Clean Air Act, including the attainment demonstration, reasonable further progress demonstration, reasonably available control measures, and contingency elements of a SIP.

To address the remaining SIP requirement, the District developed the *2010 Bay Area Winter Emissions Inventory for Primary PM_{2.5} and PM Precursors* (Emission Inventory SIP Submittal). The District Board of Directors adopted the Emission Inventory SIP Submittal at a public hearing on November 7, 2012.

ARB staff has reviewed the District's Emission Inventory SIP submittal and has concluded that it meets the applicable Clean Air Act requirements. Staff is recommending that the Board approve the Emission Inventory SIP Submittal as a revision to the California SIP.

ARB staff will present a written Staff Report prior to the meeting. Copies of the report may be obtained from ARB's Public Information Office, 1001 I Street, First Floor, Environmental Services Center, Sacramento, California, 95814, (916) 322-2990. The report may also be obtained from ARB's website at:
<http://www.arb.ca.gov/planning/sip/sip.htm>

Interested members of the public may present comments verbally or in writing at the meeting and may be submitted by postal mail or by electronic submittal before the meeting. To be considered by the Board, written comments not physically submitted at the meeting must be received **no later than 12:00 noon, December 5, 2012**, and addressed to the following:

Postal mail: Clerk of the Board, Air Resources Board
1001 I Street, Sacramento, California 95814

Electronic submittal: <http://www.arb.ca.gov/lispub/comm/bclist.php>

You can sign up online in advance to speak at the Board meeting when you submit an electronic board item comment. For more information go to:
<http://www.arb.ca.gov/board/online-signup.htm>.

Please note that under the California Public Records Act (Government Code section 6250 et seq.), your written and verbal comments, attachments, and associated contact information (e.g., your address, phone, email, etc.) become part of the public record and can be released to the public upon request.

ARB requests that written and email statements on this item be filed at least 10 days prior to the meeting so that ARB staff and Board members have additional time to consider each comment. Further inquiries regarding this matter should be directed to Ms. Sylvia Vanderspek, Manager, Particulate Matter Analysis Section, Planning and Technical Support Division at (916) 324-7163 or Ms. Elizabeth Melgoza, Air Pollution

Specialist, Particulate Matter Analysis Section, Planning and Technical Support Division
at (916) 322-6161.

SPECIAL ACCOMMODATION REQUEST

Special accommodation or language needs can be provided for any of the following:

- An interpreter to be available at the hearing;
- Documents made available in an alternate format or another language;
- A disability-related reasonable accommodation.

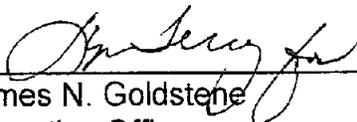
To request these special accommodations or language needs, please contact the Clerk of the Board at (916) 322-5594 or by facsimile at (916) 322-3928 as soon as possible, but no later than 10 business days before the scheduled Board hearing. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Comodidad especial o necesidad de otro idioma puede ser proveído para alguna de las siguientes:

- Un intérprete que esté disponible en la audiencia;
- Documentos disponibles en un formato alterno u otro idioma;
- Una acomodación razonable relacionados con una incapacidad.

Para solicitar estas comodidades especiales o necesidades de otro idioma, por favor llame a la oficina del Consejo al (916) 322-5594 o envíe un fax a (916) 322-3928 lo más pronto posible, pero no menos de 10 días de trabajo antes del día programado para la audiencia del Consejo. TTY/TDD/Personas que necesiten este servicio pueden marcar el 711 para el Servicio de Retransmisión de Mensajes de California.

CALIFORNIA AIR RESOURCES BOARD



James N. Goldstene
Executive Officer

Date: *November 13, 2012*

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at www.arb.ca.gov.

STATE OF CALIFORNIA
 CALIFORNIA AIR RESOURCES BOARD
 STAFF REPORT

**ANALYSIS OF THE
 2012 PM_{2.5} EMISSIONS INVENTORY SUBMITTAL
 TO THE STATE IMPLEMENTATION PLAN FOR
 THE SAN FRANCISCO BAY AREA**

I. BACKGROUND

The federal Clean Air Act (Act) establishes planning requirements for those areas that exceed the health-based National Ambient Air Quality Standards (standards). Areas are designated as nonattainment based on monitored exceedances of these standards. These nonattainment areas must develop and implement a State Implementation Plan (SIP) that demonstrates how they will attain the standards by specified dates.

In December 2006, the United States Environmental Protection Agency (U.S. EPA) lowered the 24-hour standard for fine particulate matter (PM_{2.5}) from 65 µg/m³ to 35 µg/m³. Effective December 14, 2009, U.S. EPA designated the San Francisco Bay Area in the Bay Area Air Quality Management District (District) as nonattainment for this more stringent 24-hour PM_{2.5} standard. The subsequent SIP submittal deadline is December 14, 2012.

II. CLEAN DATA POLICY REQUIREMENTS

Under the U.S. EPA's *Clean Data Policy for the Fine Particulate National Ambient Air Quality Standards* (Clean Data Policy), areas designated nonattainment that subsequently attain the standard prior to the SIP submittal deadline are eligible for reduced regulatory requirements. Based on quality-assured federal reference method monitoring data for 2009-2011, the San Francisco Bay Area has demonstrated attainment of the 24-hour PM_{2.5} standard (Table 1).

Table 1

98 th Percentile (µg/m ³)				3-year Average (µg/m ³)	
2008	2009	2010	2011	2008-2010 Design Value	2009-2011 Design Value
36	34.1	29.2	30.6	31	30

On December 8, 2011, The Air Resources Board (ARB) submitted a request to U.S. EPA to find the San Francisco Bay Area in attainment of the 35 $\mu\text{g}/\text{m}^3$ 24-hour $\text{PM}_{2.5}$ standard. This clean data finding under the Clean Data Policy suspends the majority of the planning elements under the Act, including the attainment demonstration, reasonably available control measures, and contingency elements of a SIP. The only planning element required under the Clean Data Policy is an emission inventory. Other requirements under the Act, specifically transportation conformity and new source review, are still applicable and are discussed in Section IV of this document.

III. EVALUATION OF THE SAN FRANCISCO BAY AREA EMISSION INVENTORY

The District developed the *2010 Bay Area Winter Emissions Inventory for Primary $\text{PM}_{2.5}$ and PM Precursors* (Emission Inventory SIP Submittal) to address the emission inventory requirements under the Clean Data Policy. The District Board of Directors adopted the Emission Inventory SIP Submittal at a public hearing on November 7, 2012.

An essential tool to support the evaluation, control, and mitigation of air pollutants, an emission inventory is a systematic listing of air pollutant sources, along with an accounting of the amount of pollutants emitted by each source or category over a given period of time. This accounting is an estimate of emissions, not direct ambient concentration measurements. U.S. EPA requires states to submit an attainment year inventory that includes directly emitted $\text{PM}_{2.5}$ emissions, as well as emissions of precursors that contribute to the formation of particles formed through chemical reactions in the atmosphere, in particular, oxides of nitrogen (NO_x), oxides of sulfur (SO_x), reactive organic gases (ROG), and ammonia (NH_3).

In addition, U.S. EPA allows the use of a seasonal inventory, rather than an annual inventory, when it has been demonstrated that the seasonal emissions have significantly led to the original nonattainment status. Analysis of daily air quality data has demonstrated that high $\text{PM}_{2.5}$ concentrations occur primarily during the winter season. Exceedances during other seasons have been demonstrated to have been influenced by exceptional events, such as wildfires, but are outside of regulatory control.

The District's Emission Inventory SIP Submittal is the most up-to-date emission inventory for the San Francisco Bay Area. Based on the daily winter season $\text{PM}_{2.5}$ emissions for 2010, it is typical of the 2008-2010 attainment demonstration years. The winter-time 2010 baseline inventory includes $\text{PM}_{2.5}$, NO_x , SO_x , ROG, and NH_3 emissions. Residential wood burning and gasoline and diesel vehicles comprise about two thirds of the directly emitted $\text{PM}_{2.5}$ emissions. On-road motor vehicles make up the largest source of NO_x and ROG emissions.

IV. OTHER CLEAN AIR ACT REQUIREMENTS

a. Conformity

The Act requires that procedures be in place to ensure that there is conformity of federal actions and federally funded transportation projects efforts to attain federal air quality standards. Under the Clean Data Policy, the District had a choice to either set transportation conformity budgets or allow the existing transportation conformity process to continue. The District chose to allow the existing process to continue. Under this process, the District works closely with the Metropolitan Transportation Commission to ensure that emissions from new transportation projects are less than the baseline (or attainment year) emissions.

b. New Source Review

U.S. EPA's New Source Review (NSR) requirements specify that there must be a method to identify and quantify allowable emissions of pollutants from construction and operation of major new or modified stationary sources in the District. Permits for new or modified stationary sources are required. This requirement is met with a revised District rule (Regulation 2) implementing NSR requirements.

V. STAFF RECOMMENDATION

ARB staff has reviewed the *2010 Bay Area Winter Emissions Inventory for Primary PM_{2.5} and PM Precursors* and consulted with District staff during this review. ARB staff finds that the Emission Inventory SIP Submittal meets all applicable Act and Clean Data Policy requirements. Therefore, staff recommends that the Board adopt the Emission Inventory SIP Submittal as a revision to the California SIP for submittal to U.S. EPA.

PROPOSED

State of California
AIR RESOURCES BOARD

**THE 2012 PM_{2.5} EMISSION INVENTORY SUBMITTAL TO THE STATE
IMPLEMENTATION PLAN FOR THE SAN FRANCISCO BAY AREA**

Resolution 12-37

December 6, 2012

Agenda Item No.: 12-9-2

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 preparing 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 of the Health and Safety Code also provides that the SIP shall include only those provisions necessary to meet the requirements of the Act;

WHEREAS, the ARB has responsibility pursuant to sections 39002, 39500, 39602, and 41650 of the Health and Safety Code for ensuring that the districts meet their responsibilities under the Act;

WHEREAS, the ARB is authorized by section 39600 of the Health and Safety Code 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 local districts have primary responsibility for controlling air pollution from non-vehicular sources and for adopting control measures, rules, and regulations to attain the NAAQS within their boundaries pursuant to sections 39002, 40000, 40001, 40701, 40702, and 41650 of the Health and Safety Code;

WHEREAS, the San Francisco Bay Area consists of Napa, Marin, San Francisco, Contra Costa, Alameda, San Mateo, and Santa Clara counties, the southern portion of Sonoma County, and the western portion of Solano County;

WHEREAS, the Bay Area Air Quality Management District (Bay Area District) is responsible for carrying out these responsibilities in the San Francisco Bay Area pursuant to section 40200 of the Health and Safety Code;

WHEREAS, in December 2006, the United States Environmental Protection Agency (U.S. EPA) lowered the 24-hour NAAQS for fine particulate matter (PM_{2.5}) from 65 ug/m³ to 35 ug/m³;

WHEREAS, effective December 14, 2009, U.S. EPA designated the San Francisco Bay Area as nonattainment for the 35 ug/m³ PM_{2.5} NAAQS, and established a SIP due date of December 14, 2012;

WHEREAS, in March 2007, U.S. EPA finalized the PM_{2.5} implementation rule (Rule) which established the framework and requirements that states must meet in developing PM_{2.5} SIPs;

WHEREAS, nonattainment areas that attain the NAAQS prior to the SIP submittal due date are eligible for reduced regulatory requirements as described in U.S. EPA's *Clean Data Policy for the Fine Particulate National Ambient Air Quality Standards* (Clean Data Policy) released on December 14, 2004;

WHEREAS, when a nonattainment area has air quality levels below the NAAQS, the Clean Data Policy specifies that the attainment demonstration, reasonable further progress, reasonably available control measures, and contingency SIP elements are no longer required;

WHEREAS, consistent with section 107(d)(3)(E) of the Act, the Bay Area District has demonstrated attainment of the PM_{2.5} NAAQS in the 2008-2010 period for the San Francisco Bay Area, based on quality-assured federal reference method monitoring data from the State and local monitoring network;

WHEREAS, on December 8, 2011, ARB submitted a request to the U.S. EPA to issue a Clean Data Finding for the San Francisco Bay Area;

WHEREAS, the Bay Area District developed the *2010 Bay Area Winter Emissions Inventory for Primary PM_{2.5} and PM Precursors* (Emission Inventory SIP Submittal) to address the requirements of the Act;

WHEREAS, federal law set forth in section 110(l) of the Act and Title 40, Code of Federal Regulations (CFR), 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 the U.S. EPA of any SIP revision;

WHEREAS, as required by federal law, the Bay Area District made the Emission Inventory SIP Submittal available for public review at least 30 days prior to the Bay Area District Board of Directors hearing;

WHEREAS, following a public hearing on November 7, 2012, the Bay Area District Board of Directors voted to approve the Emission Inventory SIP Submittal;

WHEREAS, the California Environmental Quality Act (CEQA) requires 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, on November 9, 2012, the Bay Area District transmitted the Emission Inventory SIP Submittal to ARB as a SIP revision, along with proof of public notice publication, and environmental documents prepared in accordance with State and federal law;

WHEREAS, the Board finds that the Emission Inventory SIP Submittal meets all applicable PM2.5 planning requirements established by the Act and the Rule, and includes the required emissions data; and

WHEREAS, the Board further finds that ARB has reviewed and considered the Emission Inventory SIP Submittal, along with environmental documents and comments presented by interested parties, and finds that they are consistent with the requirements of the Act and CEQA.

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby adopts the Emission Inventory SIP Submittal as a revision to the California SIP.

BE IT FURTHER RESOLVED, that the Board hereby directs the Executive Officer to forward the Emission Inventory SIP Submittal as approved to U.S. EPA for inclusion in the SIP to be effective, for purposes of federal law, upon approval by U.S. EPA.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to work with the Bay Area District and U.S. EPA and take appropriate action to resolve any completeness or approvability issues that may arise regarding the SIP submission.

BE IT FURTHER RESOLVED that the Board authorizes the Executive Officer to include in the SIP submittal any technical corrections, clarifications, or additions that may be necessary to secure U.S. EPA approval.

BE IT FURTHER RESOLVED that the Board hereby certifies pursuant to 40 CFR section 51.102 that the Emission Inventory SIP Submittal was adopted after notice and public hearing as required by 40 CFR section 51.102.

State of California
AIR RESOURCES BOARD

Staff Report: 2012 Haagen-Smit Clean Air Awards

Date of Presentation: December 6, 2012

I. INTRODUCTION AND BACKGROUND

Arie J. Haagen-Smit, a native of the Netherlands, was a graduate of the University of Utrecht and a biochemistry professor at the California Institute of Technology in Pasadena for 16 years before beginning his air pollution research in 1948. At Caltech, Dr. Haagen-Smit studied the physiological aspects of natural products like rubber and pineapples. This work led to studies with his colleagues investigating the flavor components of wine, onions, and garlic. His training and expertise in microchemistry, along with his natural curiosity, brought him to the forefront of air pollution research when he was asked by the County of Los Angeles (L.A.) to investigate the chemical nature of what we now call smog. Noticeably different from earlier accounts of haze and dust in London, which was caused by coal, the eye-irritating haze in L.A. was brown and almost odorless. Dr. Haagen-Smit applied his technique of studying plant chemistry in enclosed clear chambers exposed to sunlight to figure out what caused smog in the L.A. air basin.

Through a series of experiments, he found that most of California's smog resulted from photochemistry - when exhaust from motor vehicles and industrial facilities react with sunlight to create ozone. This breakthrough provided the scientific foundation for the development of California's and nationwide air pollution control programs. In recognition of this contribution, Dr. Haagen-Smit received the National Medal of Science in 1973, this country's highest scientific honor. He became ARB's first chairman in 1968 after serving 8 years as an original Board member of ARB's predecessor, the Motor Vehicle Pollution Control Board. Dr. Haagen-Smit passed away 35 years ago, but his legacy lives on.

Since 2001, the Air Resources Board has sponsored the Haagen-Smit Clean Air Awards. The Awards are given to a select group of individuals to recognize significant career efforts in at least one of several air quality categories, which are: research, environmental policy, science and technology, public education, or community service. Over the last 11 years, 31 distinguished people have received the award.

The recipients of the 2012 Haagen-Smit Clean Air Award are:

- Mr. Tom Cackette – for his work in the area of Environmental Policy
- Ms. Andrea M. Hricko – for her work in the area of Public Education
- Dr. Ronald O. Loveridge – for his work in the area of Environmental Policy

II. BACKGROUND AND BIOGRAPHY FOR EACH WINNER

Mr. Tom Cackette for his work in the area of Environmental Policy.

Mr. Cackette has been with the Air Resources Board since 1982 and serves as the Chief Deputy Executive Officer of the staff of ARB. Tom has managed several of the Board's key programs ranging from the motor vehicle emission control program, as well as the Board's Monitoring and Laboratory Division and the Research Division. Prior to his career at ARB, Mr. Cackette served as a Legislative lobbyist for ARB and worked eight years for the U.S. EPA's Motor Vehicle Emission Laboratory in a variety of technical, management and policy positions. He has a Master's of Science degree in Engineering.

Mr. Cackette has been involved in many areas of air pollution control since the 1970s but is most notably recognized for his guidance and perseverance in mobile source control regulations for the ARB, many of which have influenced similar national and international policies. His most recent contributions are the Low-Emission Vehicle and Zero-Emission Vehicle regulations along with groundbreaking funding incentives such as the Carl Moyer and Lower-Emission School Bus Programs. Taken together, these programs have led to the accelerated development, demonstration, and fleet acquisition of a portfolio of clean-fueled transportation technologies with dramatic co-benefits including: reduced emissions leading to profound public health benefits, reduced dependency on petroleum matched by increased fuel diversity, and demonstrable progress toward clean-energy alternatives.

In 1993, he was instrumental in navigating the new heavy-duty vehicle standards with diesel engine manufacturers resulting in dramatic reductions of diesel particulate, sulfur oxide, and nitrous oxide emissions. He has maintained the integrity of the agreement throughout the past two decades which has now resulted in new developments in fuels, engine technologies, and industry and government collaboration.

Under Tom's leadership, the Low-Emission Vehicle Program, first adopted in 1990, paved the way for a multitude of programs geared towards clean air vehicle technologies that have continued California's tradition of trailblazing clean transportation policies. Not once, but twice now, Tom successfully worked with federal agencies to extend California's light-duty vehicle greenhouse gas standards to the national level. And thanks to the latest Advanced Clean Cars Program, new vehicles in 2025 will emit 75 percent less smog-forming pollution than the average new car sold today.

Mr. Cackette not only understands the political, economic, and technological barriers and possibilities in air pollution control, but he also has a knack for communicating with diverse audiences on these topics in meaningful ways. He has brought clarity to air quality issues in a broad range of forums, from technical presentations, to testimonies before the state legislature and the U.S. Congress, to dialogs with community groups, business associations, and international conferences.

Mr. Cackette's efforts have helped build the reputation of ARB as a nationally and internationally recognized force for positive air quality management and public health protections based on sound science and sustainable economics.

Though he is retiring from the Board this year, his work and passion to improve California's air and in turn ensuring the vitality of the people and communities will be a long-standing legacy.

Ms. Andrea M. Hricko for her work in the area of Public Education.

Ms. Hricko is a Professor of Clinical Preventive Medicine at the Keck School of Medicine at the University of Southern California as well as the Director of the Community Outreach and Education Program of the Southern California Environmental Health Sciences Center, a partnership between USC and UCLA. She also directs the Community Outreach and Translation Core of the USC/UCLA Children's Environmental Health Center, funded by the National Institute of Environmental Health Sciences and U.S. EPA. She has a Masters of Public Health from the University of North Carolina.

Ms. Hricko has worked in the public health field for over 40 years and her professional experience includes serving as Deputy Assistant Secretary for the U.S. Department of Labor's Mine Safety and Health Administration, a contributing author for the journal Environmental Health Perspectives, and as an Emmy Award-winning writer and Segment producer of consumer and environmental stories for KCBS-TV in Los Angeles.

Her current work involves environmental justice topics surrounding public health impacts from goods movement in the ports of Long Beach and Los Angeles. She served on the U.S. EPA National Environmental Justice Committee's Working Group on Ports and Goods Movement, the Governor of California's Cabinet-Level Goods Movement Action Plan Integrating Work Group, and the Southern California Association of Governments Goods Movement Task Force, helping to formulate more sustainable transportation and goods movement policies. She is also founder of "The Impact Project", a nationwide community-academic partnership focused on reducing the health impacts of international trade.

She is widely regarded as an inspiration to the youth and community members she serves and for empowering community-based organizations to educate their communities and local policymakers about the health effects of air pollution and more effectively advocate for cleaner air and better land use decision making.

Ms. Hricko has been recognized by South Coast AQMD with an Environmental Stewardship Award, the Physicians for Social Responsibility with and Environmental Health Champion Award, and by the nonprofit Coalition for Clean Air with an Environmental Leadership Award for her "longtime efforts to help the public understand the science of air pollution's public health impacts." We are honored to add the Haagen-Smit Clean Air Award to this list.

We thank Ms. Hricko's for her dedication to her community and improving California's clean air legacy.

Dr. Ronald O. Loveridge for his work in the area of Environmental Policy.

Dr. Loveridge has served on the Air Resources Board for 8 years. He has been Mayor of Riverside since 1994 and served on the South Coast Air Quality Management District Governing Board since 1995. Before becoming Mayor, he was a member of the Riverside City Council from 1979 to 1994. He is also an Associate Professor in Political Science at the University of California, Riverside, where he has taught since 1965. He has a Master's and Doctorate in Political Science from Stanford University.

Dr. Loveridge was President of the League of California Cities, a member of the Regional Council of the Southern California Association of Governments, and has been honored by the American Lung Association for his leadership in protecting public health from air pollution. He received the National Association of Regional Councils Tom Bradley Award in 2005 for his outstanding leadership and commitment to improving transportation and maintaining the region's preferred quality of life.

Accomplishments as Mayor include implementing a Strategic Action Plan to Make Riverside a Model Clean Air City in 2002. And in 2005, Riverside was recognized with an annual award by the South Coast AQMD as a Model Clean Air Community. Also in 2005, Mayor Loveridge appointed a "Clean & Green Task Force" for the City. And in 2007 the Task Force, with the Mayor's endorsement, put forth a "Sustainable Riverside Policy Statement" detailing 8 main directives including urban forestry, solar initiatives, alternative transportation modes, green building efforts, and water and air quality improvements. In 2009, Riverside was officially designated as the first "Emerald City" by California Department of Conservation Director Bridgett Luther.

As an ARB Board Member since 2004, he has been a long-standing champion of plug-in electric vehicles and community readiness. He was instrumental in navigating the Railyard Agreement in 2005 and maintaining the integrity of the agreement throughout his membership on the Board. He has also frequently served as the Board's resident expert on local government issues

Dr. Loveridge has recently been recognized by the Southern California Association of Governments for his "material and significant contributions to regional transportation, housing, land-use and environmental planning."

Dr. Loveridge is on the Advisory Board of the non-profit organization in Riverside County, Clean Air Now, which since 1969, is the oldest and most effective volunteer advocacy group for clean air in Southern California. It publicizes the health effects of air pollution and promotes clean air strategies.

You can ask anyone who has worked with or witnessed Dr. Loveridge in any of his many roles over the last 30 years and they will tell you how easy he is to work with and his ability to bring forth collaboration efforts is supreme. He has an intellectual integrity cognizant of a true leader. His professional, even-tempered and approachable demeanor is irreplaceable and will truly be missed. We thank him for his many years of service, influence, and dedication to building a cleaner, stronger California.

