

### **BOARD OF DIRECTORS** MOBILE SOURCE COMMITTEE

#### COMMITTEE MEMBERS

DISTRICT

SCOTT HAGGERTY - CHAIR JOHN AVALOS DAVID J. CANEPA **ROGER KIM** KAREN MITCHOFF

JAN PEPPER – VICE CHAIR TOM BATES DAVID E. HUDSON NATE MILEY

WEDNESDAY **DECEMBER 2, 2015** 9:30 A.M.

**7<sup>TH</sup> FLOOR BOARD ROOM** 939 ELLIS STREET SAN FRANCISCO, CA 94109

#### **AGENDA**

#### 1. CALL TO ORDER - ROLL CALL - PLEDGE OF ALLEGIANCE

The Committee Chair shall call the meeting to order and the Clerk of the Boards shall take roll of the Committee members. The Committee Chair shall lead the Pledge of Allegiance.

#### 2 **PUBLIC COMMENT PERIOD**

(Public Comment on Non-Agenda Items Pursuant to Government Code § 54954.3) Members of the public are afforded the opportunity to speak on any agenda item. All agendas for regular meetings are posted at District headquarters, 939 Ellis Street, San Francisco, CA, at least 72 hours in advance of a regular meeting. At the beginning of the regular meeting agenda, an opportunity is also provided for the public to speak on any subject within the Committee's subject matter jurisdiction. Speakers will be limited to three (3) minutes each.

Staff/Phone (415) 749-

#### APPROVAL OF THE MINUTES OF OCTOBER 22, 2015 3. Clerk of the Boards/5073

The Committee will consider approving the attached draft minutes of the Mobile Source Committee meeting of October 22, 2015.

# 4. PROJECTS AND CONTRACTS WITH PROPOSED GRANT AWARDS OVER \$100,000 K. Schkolnick/5070

kschkolnick@baaqmd.gov

The Committee will consider recommending Board of Directors approval of Carl Moyer Program and Transportation Fund for Clean Air projects requesting grant funding in excess of \$100,000, and authorize the Executive Officer/APCO to execute grant agreements for the recommended projects.

#### 5. AIR RESOURCES BOARD AND DEPARTMENT OF FINANCE AUDITS

K. Schkolnick/5070

kschkolnick@baaqmd.gov

The Committee will receive an informational report summarizing the recent audit of the Air District's state-funded incentive programs. The audit was conducted by the California Air Resources Board and the California Department of Finance.

# 6. FISCAL YEAR ENDING (FYE) 2014 TRANSPORTATION FUND FOR CLEAN AIR (TFCA) AUDIT REPORT RESULTS AND FYE 2015 REPORT ON TFCA REGIONAL FUND EXPENDITURES AND EFFECTIVENESS

K. Schkolnick/5070 kschkolnick@baaqmd.gov

The Committee will receive an informational report on an audit of Transportation Fund for Clean Air projects that closed by June 30, 2014 (FYE 2014) and the expenditures and cost-effectiveness of TFCA Regional Fund and Air District sponsored projects that closed in FYE 2015.

#### 7. COMMITTEE MEMBER COMMENTS

Any member of the Board, or its staff, on his or her own initiative or in response to questions posed by the public, may: ask a question for clarification, make a brief announcement or report on his or her own activities, provide a reference to staff regarding factual information, request staff to report back at a subsequent meeting concerning any matter or take action to direct staff to place a matter of business on a future agenda. (Gov't Code § 54954.2)

#### 8. TIME AND PLACE OF NEXT MEETING

Thursday, January 28, 2016, Bay Area Air Quality Management District Office, 939 Ellis Street, San Francisco, California 94109 at 9:30 a.m.

#### 9. **ADJOURNMENT**

The Committee meeting shall be adjourned by the Committee Chair.

#### **CONTACT:**

### MANAGER, EXECUTIVE OPERATIONS 939 ELLIS STREET, SAN FRANCISCO, CA 94109 mmartinez@baaqmd.gov

(415) 749-5016 FAX: (415) 928-8560 BAAQMD homepage: www.baaqmd.gov

- To submit written comments on an agenda item in advance of the meeting. Please note that all correspondence must be addressed to the "Members of the Mobile Source Committee" and received at least 24 hours prior, excluding weekends and holidays, in order to be presented at that Committee meeting. Any correspondence received after that time will be presented to the Committee at the following meeting.
- To request, in advance of the meeting, to be placed on the list to testify on an agenda item
- Accessibility and Title VI: The Air District provides services and accommodations upon request
  to persons with disabilities and individuals who are limited-English proficient who wish to
  address Board matters. For accommodations or translations assistance, please call 415-749-5016
  at least three days in advance of a meeting, so that arrangements can be made accordingly.

Accesibilidad y Titulo VI: El Distrito del Aire ofrece servicios y realiza las adaptaciones necesarias para las personas con discapacidades y para las personas con un dominio limitado del inglés siempre que estos servicios se soliciten y se deseen tratar asuntos relacionados con la Junta. Si necesita ayuda con algún tipo de adaptación o traducción, llame al 415-749-5016 como mínimo tres días antes de la reunión de manera que puedan realizarse las adaptaciones necesarias.

**Magagamit na Tulong at Titulo VI:** Nagbibigay ang Air District ng mga serbisyo at mga akomodasyon, kapag hiniling, sa mga taong may kapansanan at mga taong limitado ang kakayahan sa Ingles na gustong magpahayag tungkol sa mga usapin sa harap ng Lupon. Para sa mga tulong sa akomodasyon o sa pagsasalin, mangyaring tumawag sa 415-749-5016 nang tatlong araw man lamang na una pa sa miting, para makapaghanda ayon sa pangangailangan.

可及度及標題VI:空氣管理局根據申請為殘障人士和英語熟練程度有限但卻希望參與董事會事宜的人員提供服務和住宿。關於住宿或者翻譯幫助,請至少在會議之前三天致電 415-749-5016,以便作出相應安排。

**Tạo Khả Năng Truy Cập và Chương VI:** Đặc Khu cung cấp dịch vụ và phương tiện đáp ứng, khi có yêu cầu, cho những người bị khuyết tật và cho những cá nhân không thông thạo Anh ngữ muốn được tham gia các vấn đề của Hội Đồng. Để được phương tiện đáp ứng hoặc trợ giúp phiên dịch, xin gọi số 415-749-5016 ít nhất ba ngày trước khi có hội thảo, để tiện bố trí các phương tiện

Any writing relating to an open session item on this Agenda that is distributed to all, or a majority of all, members of the body to which this Agenda relates shall be made available at the District's offices at 939 Ellis Street, San Francisco, CA 94109, at the time such writing is made available to all, or a majority of all, members of that body

# BAY AREA AIR QUALITY MANAGEMENT DISTRICT 939 Ellis Street, San Francisco, California 94109 FOR QUESTIONS PLEASE CALL (415) 749-5016 or (415) 749-4941

# EXECUTIVE OFFICE: MONTHLY CALENDAR OF AIR DISTRICT MEETINGS

# **NOVEMBER 2015**

**DATE** 

**TIME** 

**ROOM** 

**DAY** 

**TYPE OF MEETING** 

- CANCELLED

Board of Directors Mobile Source Committee (Meets on the 4th Thursday of each Month) - CANCELLED	Thursday	26	9:30 a.m.	Board Room
<b>Board of Directors Special Meeting</b> (Meets on the 3 <sup>rd</sup> Monday of each Month)	Monday	30	9:45 a.m.	Board Room
	<b>DECEM</b>	BER 2	015	
TYPE OF MEETING	<u>DAY</u>	<b>DATE</b>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Regular Meeting (Meets on the 1 <sup>st</sup> & 3 <sup>rd</sup> Wednesday of each Month) - CANCELLED	Wednesday	2	9:45 a.m.	Board Room
Board of Directors Mobile Source Committee (Meets on the 4 <sup>th</sup> Thursday of each Month)	Wednesday	2	9:30 a.m.	Board Room
Advisory Council Meeting (At the Call of the Chair)	Thursday	3	9:30 a.m.	Board Room
<b>Board of Directors Budget &amp; Finance</b> Committee (Meets on the 4 <sup>th</sup> Wednesday of each Month)	Monday	7	9:30 a.m.	Board Room
<b>Board of Directors Executive Committee</b> (Meets on the 3 <sup>rd</sup> Monday of each Month)	Monday	14	9:30 a.m.	Board Room
<b>Board of Directors Ad Hoc Building Committee</b> (At the Call of the Chair)	Monday	14	11:00 a.m.	Board Room
<b>Board of Directors Regular Meeting</b> (Meets on the 1 <sup>st</sup> & 3 <sup>rd</sup> Wednesday of each Month)	Wednesday	16	9:45 a.m.	Board Room
<b>Board of Directors Stationary Source Committee</b> (Meets on the 3 <sup>rd</sup> Monday of each Month) <b>CANCELLED</b>	Monday	21	10:30 a.m.	Board Room
Board of Directors Budget & Finance Committee (Meets on the 4 <sup>th</sup> Wednesday of each Month) - CANCELLED	Wednesday	23	9:30 a.m.	Board Room
Board of Directors Mobile Source Committee (Meets on the 4 <sup>th</sup> Thursday of each Month)	Thursday	24	9:30 a.m.	Board Room

# **JANUARY 2016**

TYPE OF MEETING	<u>DAY</u>	<b>DATE</b>	<b>TIME</b>	ROOM
<b>Board of Directors Regular Meeting</b> (Meets on the 1 <sup>st</sup> & 3 <sup>rd</sup> Wednesday of each Month)	Wednesday	6	9:45 a.m.	Board Room
<b>Board of Directors Executive Committee</b> (Meets on the 3 <sup>rd</sup> Monday of each Month)	Monday	18	9:30 a.m.	Board Room
<b>Board of Directors Stationary Source</b> Committee (Meets on the 3 <sup>rd</sup> Monday of each Month)	Monday	18	10:30 a.m.	Board Room
<b>Special Board of Directors Meeting / Retreat</b> (Meets on the 1 <sup>st</sup> & 3 <sup>rd</sup> Wednesday of each Month)	Wednesday	20	9:45 a.m.	Location: Port of San Francisco Bayside Room Pier 1 San Francisco, CA 94111
<b>Board of Directors Climate Protection Committee</b> (Meets 3 <sup>rd</sup> Thursday of every other Month)	Thursday	21	9:30 a.m.	Board Room
<b>Board of Directors Budget &amp; Finance Committee</b> (Meets on the 4 <sup>th</sup> Wednesday of each Month)	Wednesday	27	9:30 a.m.	<b>Board Room</b>
<b>Board of Directors Mobile Source Committee</b> (Meets on the 4 <sup>th</sup> Thursday of each Month)	Thursday	28	9:30 a.m.	Board Room

VJ - 11/25/15 (9:45 a.m.)

G/Board/Executive Office/Moncal

#### BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Scott Haggerty and Members

of the Mobile Source Committee

From: Jack P. Broadbent

Executive Officer/Air Pollution Control Officer

Date: November 20, 2015

Re: Approval of the Minutes of October 22, 2015

### RECOMMENDED ACTION

Approve attached draft minutes of the Mobile Source Committee (Committee) meeting of October 22, 2015.

#### **DISCUSSION**

Attached for your review and approval are the draft minutes of the Committee meeting of October 22, 2015.

Respectfully submitted,

Jack P. Broadbent

Executive Officer/APCO

Prepared by: <u>Sean Gallagher</u>
Reviewed by: <u>Maricela Martinez</u>

Attachment: Draft Minutes of the Committee Meeting of October 22, 2015

Draft Minutes – Mobile Source Committee Meeting of October 22, 2015

Bay Area Air Quality Management District 939 Ellis Street San Francisco, California 94109 (415) 749-5073

#### **DRAFT MINUTES**

Summary of Board of Directors Mobile Source Committee Meeting Thursday, October 22, 2015

#### 1. CALL TO ORDER – ROLL CALL – PLEDGE OF ALLEGIANCE

Vice-Chairperson Jan Pepper called the meeting to order at 9:40 a.m.

Present: Chairperson Scott Haggerty; Vice-Chairperson Jan Pepper; and Directors John

Avalos, David J. Canepa, David Hudson, Roger Kim (on behalf of Edwin Lee),

Nate Miley and Karen Mitchoff.

Absent: Director Tom Bates.

Also Present: None.

2. PUBLIC COMMENT ON NON-AGENDA MATTERS: No requests received.

#### 3. APPROVAL OF THE MINUTES OF SEPTEMBER 24, 2015

Committee Comments: None.

Public Comments: No requests received.

#### Committee Action:

Director Hudson made a motion, seconded by Director Kim, to approve the Minutes of September 24, 2015; and the motion carried by the following vote of the Committee:

AYES: Avalos, Canepa, Hudson, Kim and Pepper.

NOES: None. ABSTAIN: None.

ABSENT: Bates, Haggerty, Miley and Mitchoff.

#### 4. OVERVIEW OF THE AIR DISTRICT'S TRIP REDUCTION PROGRAMS

Karen Schkolnick, Acting Director of the Strategic Incentives Division, introduced the topic and Chengfeng Wang, Supervising Air Quality Specialist of the Strategic Incentives Division, who gave the staff presentation *Overview of the Air District's Trip Reduction Programs*, including background information; a summary of the types of trip reduction programs and services that

have been funded by the Air District; an overview of how the Air District and the Metropolitan Transportation Commission partner to support trip reduction in the region; and an update on a new pilot trip reduction incentive program that will be offered by the Air District early next year.

NOTED PRESENT: Chairperson Haggerty and Directors Miley and Mitchoff were noted present at 9:43 a.m.

#### **Committee Comments:**

The Committee and staff discussed the project cost effectiveness trend resulting from improved fleet technology; how the cost effectiveness calculations are performed; the changing nature of projects which are cost effective; under what conditions a shuttle must have zero emissions in order to be cost effective; committee member desire to redirect funding from shuttles that are seemingly duplicative of existing bus service to projects that serve the last mile; if congestion relief is adequately weighted as a factor in the project analysis process; whether and how matching funds and operational factors both impact cost effectiveness calculations; whether corporate shuttles are eligible for funding; and the existence and number of Google shuttles seemingly in operation in Mountain View.

Public Comments: No requests received.

Committee Action: None; receive and file.

### 5. CONSIDERATION OF FISCAL YEAR ENDING (FYE) 2016 TRANSPORTATION FUND FOR CLEAN AIR (TFCA) REGIONAL FUND SHUTTLE AND RIDESHARE PROJECTS

Ms. Schkolnick introduced Kenneth Mak, Air Quality Specialist in the Strategic Incentives Division, who gave the staff presentation *FYE 2016 TFCA Regional Fund Shuttle and Regional Rideshare Program*, including program background, the results of the solicitation, a summary of the projects that are eligible for award; and recommendations.

#### **Committee Comments:**

The Committee and staff discussed a clarification of service within Community Air Risk Evaluation program areas.

Public Comments: No requests received.

#### Committee Action:

Director Canepa made a motion, seconded by Director Avalos, to recommend the Board of Directors (Board):

1. Approve the proposed awards for the seven TFCA projects listed in Attachment A to the staff memorandum; and

2. Authorize the Executive Officer/Air Pollution Control Officer to enter into agreements for the recommended TFCA projects in Attachment A to the staff memorandum.

#### Committee Comments (continued):

The Committee and staff discussed whether the proposed shuttles are providing last mile service; how the cost effectiveness calculations generated the current recommendations; why no projects in Los Altos Hills are included; which counties the recommended projects operate from and the general nature of those services; the hours of operation for recommended shuttles; the scale of emissions reductions listed on slide 6, *Projects Recommended for Award (FYE 2016)*, and the impact of cost effectiveness calculations when considered alone with related variables.

#### Committee Action (continued):

The motion carried by the following vote of the Committee:

AYES: Avalos, Canepa, Haggerty, Hudson, Kim, Miley, Mitchoff and Pepper.

NOES: None. ABSTAIN: None. ABSENT: Bates.

# 6. TFCA COUNTY PROGRAM MANAGER (CPM) FUND POLICIES FOR FYE 2017 AND MODIFICATION TO FYE 2016 CPM FUND POLICIES

Ms. Schkolnick introduced Linda Hui, Administrative Analyst of the Strategic Incentives Division, who gave the staff presentation *TFCA CPM Fund Policies for FYE 2017*, including program background; a review of the proposed revisions and the process to solicit and incorporate public input; a request to modify a prior year policy to align its requirements with those of the Regional Fund; and recommendations.

#### **Committee Comments:**

The Committee and staff discussed the nexus for the recommendation relative to cost effectiveness.

Public Comments: No requests received.

#### **Committee Action:**

Director Hudson made a motion, seconded by Director Mitchoff, to recommend the Board:

- 1. Approve the proposed FYE 2017 TFCA CPM Fund Policies; and
- 2. Approve a proposed change to FYE 2016 TFCA CPM Fund Policy #28 to increase the cost-effectiveness limit to \$175,000/ton of emissions reduced for shuttle projects to align it with the FYE 2015 TFCA Regional Fund cost-effectiveness limit.

#### Committee Comments (continued):

The Committee and staff discussed the environmental review process as it relates to these projects; that nature of the disagreement in the community about the appropriateness of requiring environmental review for bike projects; committee member desire to amend the environmental review language; how many bike plans are likely to trigger an environmental review; possible unintended consequences of deleting language; what prevents later bike project extension requests and how they would be handled by staff, if received; and the lifecycle of the average bike lane project.

#### Committee Action (continued):

Director Hudson made an amended motion, seconded by Director Mitchoff, to recommend the Board:

- 1. Approve the proposed FYE 2017 TFCA CPM Fund Policies in Attachment A to the staff memorandum, as amended to delete the following language relative to Policy 29, *Bicycle Projects*, on page 7, first paragraph, that reads, "Projects must also have a completed and approved environmental plan. If a project is exempt from preparing an environmental plan as determined by the public agency or lead agency, then that project has met this requirement."; and
- 2. Approve a proposed change to FYE 2016 TFCA CPM Fund Policy #28 to increase the cost-effectiveness limit to \$175,000/ton of emissions reduced for shuttle projects to align it with the FYE 2015 TFCA Regional Fund cost-effectiveness limit.

The motion carried by the following vote of the Committee:

AYES: Avalos, Canepa, Haggerty, Hudson, Kim, Miley, Mitchoff and Pepper.

NOES: None. ABSTAIN: None. ABSENT: Bates.

- 7. **COMMITTEE MEMBER COMMENTS:** None.
- **8. TIME AND PLACE OF NEXT MEETING:** At the call of the Chairperson.
- **9. ADJOURNMENT:** The meeting adjourned at 10:49 a.m.

Sean Gallagher Clerk of the Boards

AGENDA: 4

#### BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Scott Haggerty and Members

of the Mobile Source Committee

From: Jack P. Broadbent

Executive Officer/APCO

Date: November 20, 2015

Re: Projects and Contracts with Proposed Grant Awards over \$100,000

#### RECOMMENDATIONS

#### Recommend Board of Directors:

1. Approve Carl Moyer Program (CMP) and Transportation Fund for Clean Air (TFCA) projects with proposed grant awards over \$100,000 as shown in Attachment 1; and

2. Authorize the Executive Officer/APCO to enter into agreements for the recommended projects.

#### **BACKGROUND**

The Bay Area Air Quality Management District (Air District) has participated in the Carl Moyer Program (CMP), in cooperation with the California Air Resources Board (ARB), since the program began in fiscal year 1998-1999. The CMP provides grants to public and private entities to reduce emissions of oxides of nitrogen (NOx), reactive organic gases (ROG) and particulate matter (PM) from existing heavy-duty engines by either replacing or retrofitting them. Eligible heavy-duty diesel engine applications include on-road trucks and buses, off-road equipment, marine vessels, locomotives, and stationary agricultural pump engines.

Assembly Bill 923 (AB 923 - Firebaugh), enacted in 2004 (codified as Health and Safety Code Section 44225), authorized local air districts to increase their motor vehicle registration surcharge up to an additional \$2 per vehicle. The revenues from the additional \$2 surcharge are deposited in the Air District's Mobile Source Incentive Fund (MSIF). AB 923 stipulates that air districts may use the revenues generated by the additional \$2 surcharge for projects eligible under the CMP.

On February 18, 2015, the Board of Directors authorized Air District participation in Year 17 of the CMP, and authorized the Executive Officer/APCO to execute Grant Agreements and amendments for projects funded with CMP funds or MSIF revenues, with individual grant award amounts up to \$100,000.

In 1991, the California State Legislature authorized the Air District to impose a \$4 surcharge on motor vehicles registered within the nine-county Bay Area to fund projects that reduce on-road

motor vehicle emissions within the Air District's jurisdiction. The statutory authority for the Transportation Fund for Clean Air (TFCA) and requirements of the program are set forth in California Health and Safety Code Sections 44241 and 44242. Each year, the Board allocates funding and adopts policies and evaluation criteria that govern the expenditure of TFCA funding.

Sixty percent of TFCA funds are awarded directly by the Air District to eligible projects and programs implemented directly by the Air District (e.g., Spare the Air, Plug-in Electric Vehicle Program) and to a program referred to as the TFCA Regional Fund.

CMP and TFCA Regional Fund projects with grant award amounts over \$100,000 are brought to the Mobile Source Committee for consideration at least on a quarterly basis. Staff reviews and evaluates the grant applications based upon the respective governing policies and guidelines established by the ARB and/or the Air District's Board of Directors.

#### **DISCUSSION**

#### **Carl Moyer Program:**

The Air District started accepting project applications for the CMP Year 17 funding cycle on August 17, 2015. The Air District has approximately \$9 million available for CMP projects from a combination of MSIF and CMP funds for the Year 17 cycle. Project applications are being accepted and evaluated on a first-come, first-served basis.

As of November 20, 2015, the Air District had received 20 project applications for the CMP Year 17 cycle. Of the applications that have been evaluated between September 7, 2015, and November 20, 2015, seven eligible projects have proposed individual grant awards over \$100,000. These projects will replace 13 pieces of off-road equipment, and two marine engines. These projects will reduce over 10.31 tons of NOx, ROG and PM per year. Staff recommends the allocation of \$1,987,152 to these projects from a combination of CMP funds and MSIF revenues. Attachment 1, Table 1, provides additional information on these projects.

Attachment 2, lists all of the eligible projects that have been received by the Air District as of November 20, 2015, and summarizes the allocation of funding by equipment category, and county. This list also includes the Voucher Incentive Program (VIP) on-road replacement projects awarded since the last committee update. Approximately 25% of the funds have been awarded to projects that reduce emissions in highly impacted Bay Area communities. Attachment 3 summarizes the cumulative allocation of CMP, MSIF, and VBB funding since 2009 (more than \$94 million awarded to 696 projects).

#### **Transportation Fund for Clean Air (TFCA):**

On May 6, 2015, the Board allocated \$24.47 million in TFCA funding for eligible projects in Fiscal Year Ending (FYE) 2016, authorized cost-effectiveness limits and evaluation criteria for Air District-sponsored FYE 2016 programs, and authorized the Executive Officer/APCO to execute Grant Agreements and amendments for TFCA-funded projects with individual grant award amounts up to \$100,000. On July 29, 2015, the Board adopted policies and evaluation

criteria for the FYE 2016 TFCA Regional Fund program. To date, the Air District has opened TFCA-funded solicitations for shuttle and rideshare, electronic bicycle locker, bicycle rack, plugin electric vehicle and electric vehicle charging station projects.

As of November 20, 2015, the Air District had received 26 project applications for TFCA funding and 16 of them have been evaluated. Of the applications that were evaluated between September 8 and November 20, 2015, one eligible project has a proposed individual grant award of over \$100,000. This project proposes to deploy 98 dual-port electric vehicle (EV) charging stations (totaling 196 charging ports) at a parking garage that is currently under construction that will serve multiple business complexes in the city of Santa Clara. This parking garage will have more than 3,000 parking spaces for employees and the public, of which 6.5% would have access to EV charging. This project will reduce over 0.21 tons of NOx, ROG and PM per year. Staff determined that the project conforms to the provisions of HSC 44241 and the Board-adopted cost effectiveness and recommends allocating \$338,546 to this project from TFCA fund revenues. Attachment 1, Table 2, provides additional information on this project.

Attachment 4, lists all of the eligible projects that have been received and approved by the Air District as of November 20, 2015. Attachment 5 summarizes the allocation of funding by project category (Figure 1), and county (Figure 2). In total these 12 projects represent approximately \$3.9 million in TFCA funding awards and will reduce more than 47 tons of NOx, ROG and PM per year.

#### BUDGET CONSIDERATION / FINANCIAL IMPACT

None. Through the CMP, MSIF and TFCA, the Air District distributes "pass-through" funds to public agencies and private entities on a reimbursement basis. Administrative costs for both programs are provided by each funding source.

Respectfully submitted,

Jack P. Broadbent Executive Director/APCO

Prepared by: Anthony Fournier & Linda Hui

Reviewed by: Karen Schkolnick

- Attachment 1: Projects with grant awards greater than \$100,000 (evaluated between 9/7/15 and 11/20/15)
- Attachment 2: Summary of all CMP/ MSIF and VIP approved and eligible projects (evaluated between 9/7/15 and 11/20/15)
- Attachment 3: Summary of program distribution by county and equipment category for CMP/ MSIF and VIP projects for Years 11-17
- Attachment 4: Summary of all TFCA approved and eligible projects (received between 9/8/15 and 11/20/15)
- Attachment 5: Summary of distribution of TFCA funds by county and project category (received between 7/1/15 and 11/20/15)

**Table 1** - Summary of Carl Moyer Program/ Mobile Source Incentive Fund projects with grant awards greater than \$100k (Evaluated between 9/7/15 and 11/20/15)

Project #	Applicant name	Equipment	Project description		Proposed Contract Award		tal Project	/T-	ion Redu ons per ye	County	
		category					Cost	NOx	ROG	PM	
17MOY5	Ironhouse Sanitary District	Ag/ off-road	Replacement of two diesel-powered tractors with one new tractor.		249,000	\$	364,984	0.925	0.078	0.027	Contra Costa
17MOY8	Andrew Guiliano, DBA, Andrew Guiliano (Charter fishing)	Marine	Replacement of one diesel-powered marine propulsion engine.		117,400	\$	138,145	0.407	0.025	0.015	Contra Costa
17MOY7	Dees-Hennessey, Inc. (Construction)	Off-road	Engine replacement for three diesel- powered pieces of construction equipment.		213,500	\$	329,244	0.966	0.109	0.038	San Mateo
17MOY1	Robert Giacomini Dairy, Inc.	Ag/ off-road	Replacement of three diesel-powered tractors.		126,370	\$	221,347	0.357	0.055	0.023	Marin
17MOY3	Daniel Lazzari DBA Daniel Lazzari (Commercial fishing)	Marine	Replacement of one diesel-powered marine propulsion engine.		154,500	\$	182,606	0.887	0.017	0.032	San Francisco
17MOY11	Ben Silacci dba Silacci Dairy	Ag/ off-road	Replacement of disel-powered off-road equipment: two tractors, two forage harvesters, and one swather.		1,005,732	\$	1,668,821	5.082	0.520	0.182	Sonoma
17MOY19	Ghiggeri and Stonebarger, LLC	Ag/ off-road	Replacement of one diesel-powered tractor.	\$	120,650	\$	180,228	0.530	0.029	0.009	Contra Costa

7 Projects \$ 1,987,152 9.154 0.832 0.326

**Table 2 -** Summary of Transporation Fund for Clean Air projects with grant awards greater than \$100k (Evaluated between 9/8/15 and 11/20/15)

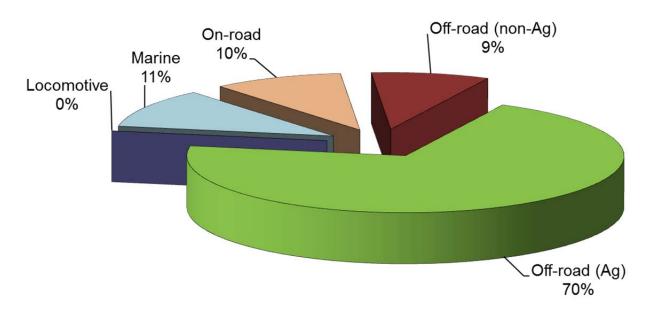
Project #	Project Sponsor	Project	Project Description	City	Est. C/E	Proposed Contract		ion Redu ons per ye	County	
	, ,	Category	, ,			Award	NO <sub>X</sub>	ROG	PM	
16EV012	Santa Clara Property Owner I LLC	Plug-in Electric Vehicles	Install 98 dual-port charging stations (196 charging ports)	Santa Clara	\$ 249,996	\$ 338,546	0.088	0.113	0.013	Santa Clara

1 Project \$ 338,546 0.088 0.113 0.013

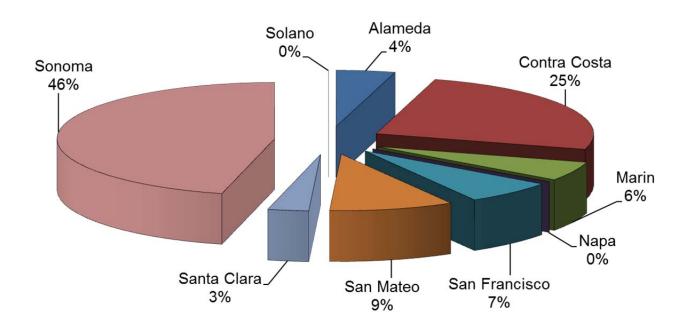
Summary of all CMP, MSIF and VIP approved/ eligible projects (between 9/7/15 and 11/20/15)

	Equipment category			Proposed contract award				ion Reduc ons per ye		Board	County
Project #		Project type	# of engines			Applicant name	NOx	ROG	PM	approval date	
17MOY5	Ag/ off-road	Equipment replacement	1	\$	249,000.00	Ironhouse Sanitary District	0.925	0.078	0.027	TBD	Contra Costa
17MOY8	Marine	Engine replacement	1	\$	117,400.00	Andrew Guiliano, DBA, Andrew Guiliano (Charter fishing)	0.407	0.025	0.015	TBD	Contra Costa
17MOY7	Off-road	Engine replacement	3	\$	213,500.00	Dees- Hennessey, Inc. (Construction)	0.966	0.109	0.038	TBD	San Mateo
17MOY1	Ag/ off-road	Equipment replacement	3	\$	126,370.00	Robert Giacomini Dairy, Inc.	0.357	0.055	0.023	TBD	Marin
17MOY2	Ag/ off-road	Equipment replacement	1	\$	60,710.00	Donald J. Moreda, Sr (Dairy)	0.190	0.027	0.010	APCO	Sonoma
17MOY3	Marine	Engine replacement	1	\$	154,500.00	Daniel Lazzari DBA Daniel Lazzari (Commercial fishing)	0.887	0.017	0.032	TBD	San Francisco
16MOY97	Ag/ off-road	Equipment replacement	1	\$	61,200.00	Imhof Tractor Service, Inc.	0.207	0.007	0.009	APCO	Alameda
17MOY6	Ag/ off-road	Equipment replacement	1	\$	93,645.00	Gregory Lyons (Lyon's Farms)	0.339	0.048	0.021	APCO	Contra Costa
17MOY11	Ag/ off-road	Equipment replacement	5	\$	1,005,732.00	Ben Silacci dba Silacci Dairy	5.082	0.520	0.182	TBD	Sonoma
17MOY19	Ag/ off-road	Equipment replacement	1	\$	120,650.00	Ghiggeri and Stonebarger, LLC	0.530	0.029	0.009	TBD	Contra Costa
VIP265	VIP	Truck Replacement	1	\$	40,000.00	Tien Cong Huynh / Tai Cong Huynh	0.860	0.010	0.000	APCO	Alameda
VIP266	VIP	Truck Replacement	1	\$	45,000.00	IEC Puno Trans Inc or Randy Puno	0.950	0.010	0.000	APCO	Santa Clara
VIP267	VIP	Truck Replacement	1	\$	45,000.00	Martin S. Mileck	1.400	0.050	0.000	APCO	Mendocino
VIP268	VIP	Truck Replacement	1	\$	35,000.00	Dennis E. Allen	0.700	0.020	0.000	APCO	Sacramento
VIP269	VIP	Truck Replacement	1	\$	25,000.00	Steven R. Martini	0.560	0.020	0.000	APCO	Santa Clara
VIP270	VIP	Truck Replacement	1	\$	45,000.00	Richard Jones	0.980	0.040	0.000	APCO	Tehama
	16	Projects	24	\$	2,437,707.00		15.340	1.065	0.365		

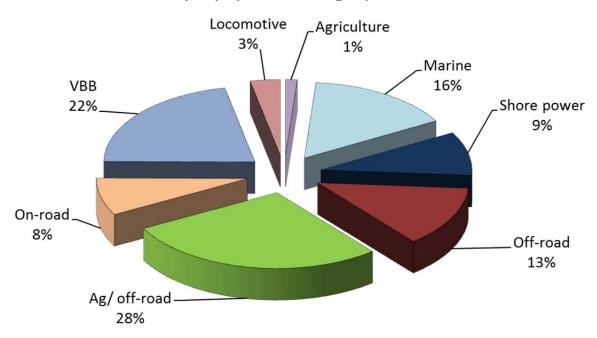
**Figure 1:** CMP/ MSIF Funding Distribution by Equipment Category as of 11/20/15



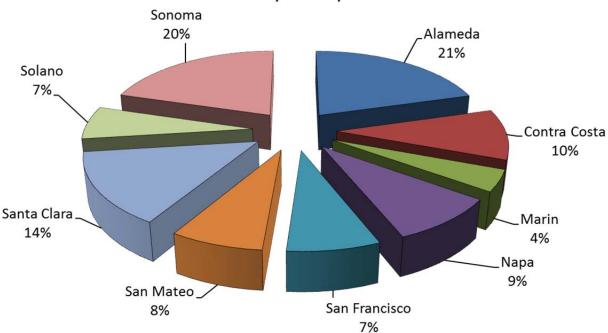
**Figure 2:** CMP/ MSIF Funding Distribution by County as of 11/20/15



**Figure 3:** CMP, MSIF, VBB and VIP funding since 2009 by equipment category



**Figure 4:** CMP, MSIF, VBB and VIP funding since 2009 by county



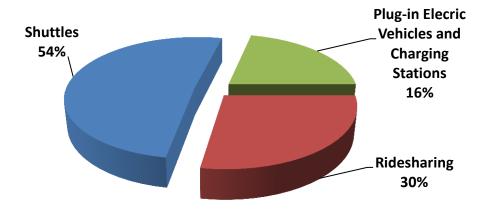
Summary of all TFCA approved and eligible projects (received between 7/1/15 and 11/20/2015)

Project	Project Category	ect Category Project Description		Applicant Name		ion Redu ons per ye		Board Approval	County
#	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,		,,	NO <sub>x</sub>	ROG	PM	Date	,
16EV001	Plug-in Electric Vehicles (PEV)	Install 10 PEV Level 2 charging stations	\$30,000	Car Charging, Inc.	0.008	0.010	0.001	10/5/15	Santa Clara
16EV003	PEV	Install 39 PEV Level 2 charging stations	\$234,000	Powertree Services Inc.	0.030	0.039	0.004	11/18/15	San Francisco
16EV004	PEV	Install 2 PEV Level 2 dual-port charging stations (4 charge ports)	\$12,000	S & V, LLC	0.003	0.004	0.000	10/5/15	Alameda
16EV012	PEV	Install 98 PEV dual-port charging stations (196 charge ports)	\$338,546	Santa Clara Campus Property Owner I LLC	0.088	0.113	0.013	Pending	Santa Clara
16PEV002	PEV	Purchase one one PEV motorcycle	\$2,500	Town of Colma Police Department	0.000	0.007	0.000	10/20/15	San Mateo
16R11	Rideshare	511 Regional Carpool Program	\$1,000,000	Metropolitan Transportation Commission	7.568	7.079	6.690	11/18/15	Regional
16R12	Rideshare	SJSU Ridesharing & Trip Reduction	\$140,000	Associated Students, San Jose State University	1.832	1.784	1.579	11/18/15	Regional
16R15	Shuttles	Ace Shuttle 53 & 54	\$80,000	San Joaquin Regional Rail Commission	0.256	0.465	0.446	11/18/15	Alameda
16R17	Shuttles	PresidiGo Shuttle	\$100,000	Presidio Trust	0.376	0.375	0.348	11/18/15	San Francisco
16R18	Shuttles	Broadway Shuttle	\$186,500	City of Oakland	0.234	0.348	0.290	11/18/15	Alameda
16R19	Shuttles	Caltrain Shuttle Program	\$775,900	Peninsula Corridor Joint Powers Board	2.329	2.374	2.085	11/18/15	San Mateo
16R20	Shuttles	ACE Shuttle Bus Program	\$960,000	Santa Clara Valley Transportation Authority	3.763	3.353	3.433	11/18/15	Santa Clara

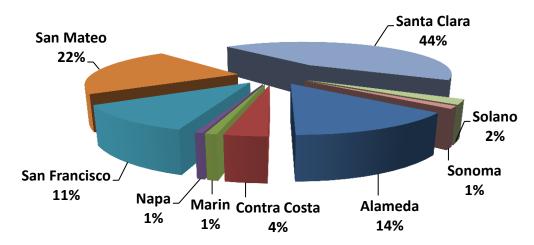
12 Projects \$3,859,446 16.49 15.95 14.89

Summary of FYE 2016 TFCA funds distributed by county and project category, as of 11/20/15

**Figure 1:** TFCA Projects Awarded for FYE2016 Distributed by Project Category



**Figure 2:** TFCA Projects Awarded for FYE2016 Distributed by County



AGENDA: 5

#### BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Scott Haggerty and Members

of the Mobile Source Committee

From: Jack P. Broadbent

Executive Officer/APCO

Date: November 20, 2015

Re: <u>Air Resources Board and Department of Finance Audits</u>

#### RECOMMENDED ACTION

None. Receive and file.

#### **BACKGROUND**

The California Air Resources Board (ARB) and California Department of Finance (DOF) conducted an audit of the Air District's state-funded incentive programs between October 2014 and November 2015. The scope of this audit included a review of over \$145 million in program expenditures from fiscal year 2007-2008, through fiscal year 2013-2014. These projects represent emission reductions from over 10,000 engines.

The ARB is responsible for overseeing a number of voluntary state air pollution reduction incentive programs that are implemented through California's 35 local air districts, and other local agencies. Sections 44274, 44291, 39500, 39625.02(e)(1) of the California Health and Safety Code provide ARB with oversight responsibilities for the Air Quality Improvement Program, Carl Moyer Program, Proposition 1B Goods Movement Program, and the Lower Emissions School Bus Program. ARB reviews examine districts' determinations of project eligibility and compliance with reporting requirements, and ensure the districts' programs comply with the following:

- California Health and Safety Code
- ARB Program guidelines and advisories
- Program grant award and authorizations
- Local air district requirements

In addition to the review of program and project documentation, ARB staff selected a sample of projects to physically inspect. Concurrently with the ARB Program Review, the DOF conducted a separate, independent financial compliance audit of the programs, including project funds, administration, match funds, and interest earned. This report summarizes the results of the ARB and DOF audits.

#### DISCUSSION

#### Carl Moyer Program (CMP)

The Air District has participated in the CMP, in cooperation with the ARB, since the program began in fiscal year 1998-1999. The CMP provides grants to public and private entities to reduce emissions of oxides of nitrogen (NOx), reactive organic gases (ROG) and particulate matter (PM) from existing heavy-duty engines by either replacing or retrofitting them. Eligible heavy-duty diesel engine applications include on-road trucks and buses, off-road equipment, marine vessels, locomotives, and stationary agricultural pump engines.

Assembly Bill 923 (AB 923 - Firebaugh), enacted in 2004 (codified as Health and Safety Code Section 44225), authorized local air districts to increase their motor vehicle registration surcharge up to an additional \$2 per vehicle. The revenues from the additional \$2 surcharge are deposited in the Air District's Mobile Source Incentive Fund (MSIF). AB 923 stipulates that air districts may use the revenues generated by the additional \$2 surcharge for projects that are eligible under the CMP and to meet the Air District's match requirements.

**Scope of the review:** During the review period, \$43,576,225 in CMP funding expenditures were reviewed. These funds were used to retrofit or replace 585 diesel engines and to retire 6,468 light-duty vehicles.

#### Proposition 1B: Goods Movement Program (GMP)

In November 2006, California voters authorized the Legislature to appropriate \$1 billion in bond funding to quickly reduce air pollution emissions and health risk from freight movement along California's priority trade corridors. On February 28, 2008, ARB approved 14% of the total local agency funding from projected bond sales for emission reduction projects in the Bay Area trade corridor. This funding has been primarily used to reduce emissions from trucks in the region and to install shore power infrastructure at the Port of Oakland.

**Scope of the review:** During the review period, \$90,446,625 in GMP funding expenditures were reviewed. These funds were used to install 930 diesel truck retrofits, replace 1,223 diesel trucks, and install shore power at 10 berths at the Port of Oakland.

#### Lower Emission School Bus Program (LESBP)

The LESBP provides financial incentives to replace older public school buses, replace on-board compressed natural gas (CNG) fuel tanks on public school buses, and retrofit in-use school buses with emission control devices to reduce the exposure of school children to harmful emissions. Over the past 20 years the Air District has funded school bus projects with funds, including: state ARB funds, Proposition 1B funds, U.S. EPA DERA funds, and local Air District funds.

**Scope of the review:** During the review period, \$8,905,208 in LESBP funding expenditures were reviewed. These funds and \$27,796,911 in local funds were used retrofit 502 diesel buses, replace 168 buses, and replace 80 CNG tanks.

#### AB118 Air Quality Improvement Program (AQIP)

AQIP is a voluntary, mobile source incentive program established through AB 118 (Núñez, Chapter 750, Statutes of 2007) to reduce criteria pollutant and toxics emissions with concurrent reductions in Greenhouse Gas (GHG) emissions. ARB has focused AQIP investments on technology advancing projects that support California's long-term air quality and climate change goals in addition to providing immediate emission benefits.

**Scope of the review:** During the review period, \$2,890,608.40 in AQIP funding expenditures were reviewed. These funds were used to support three technology demonstration projects and for the replacement of 411 lawn mowers with electric mowers.

#### AUDIT RESULTS

The ARB audit report is provided in Attachment 1. ARB did not identify any findings from their review and inspection of the Air District's programs and projects. They did offer the following suggestions to further strengthen the CMP processes: (1) develop additional procedures to ensure project file completeness, and (2) use a more detailed breakdown of project costs in staff project evaluations to reduce the risk of including ineligible costs in an analysis. Air District staff has already begun to implement these recommendations into its program procedures.

ARB also identified the following as exceptional Air District practices that go above and beyond the basic requirements for implementing incentive programs:

- Successful development of electronic filing systems for the Carl Moyer and Goods Movement Emissions Reduction programs;
- Completeness of LESBP project files and recognition of the Air District's effective and efficient administration of the program; and
- Quick implementation and funding of the replacement of over 350 drayage trucks with much cleaner trucks (May through December 2012).

The DOF has verbally notified the Air District that the results of the DOF audit did not identify any findings from their review of the Air District's programs. The final report is still pending DOF management's review. A copy of that report will be forwarded to the committee members once it is issued.

#### BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Jack P. Broadbent Executive Officer/APCO

Prepared by: <u>Anthony Fournier</u> Reviewed by: <u>Karen Schkolnick</u>

Attachment: California Air Resources Board Air Pollution Reduction Incentive Programs -

Program Review Report

# **Attachment 1:**

California Air Resources Board Air Pollution Reduction Incentive Programs Program Review Report



BAY AREA

AIR QUALITY

MANAGEMENT

DISTRICT

ALAMEDA COUNTY Tom Bates Margaret Fujioka Scott Haggerty Nate Miley

CONTRA COSTA COUNTY
John Gioia
David Hudson
Many Pionho

Mary Piepho Mark Ross

MARIN COUNTY Katie Rice

NAPA COUNTY Brad Wagenknecht

SAN FRANCISCO COUNTY John Avalos Edwin M. Lee Eric Mar (Vice-Chair)

SAN MATEO COUNTY David J. Canepa Carole Groom (Chair)

SANTA CLARA COUNTY
Cindy Chavez
Liz Kniss
(Secretary)
Jan Pepper
Rod G. Sinks

SOLANO COUNTY James Spering

SONOMA COUNTY Teresa Barrett Shirlee Zane

Jack P. Broadbent EXECUTIVE OFFICER/APCO

September 21, 2015

Richard Corey Executive Officer California Air Resources Board (ARB) 1001 I Street Sacramento, CA 95814

RE: ARB's review of the Bay Area Air Quality Management District's (District) grant programs

Dear Mr. Corey:

Thank you for your letter regarding the results of the recently completed ARB review of the District's incentive programs. The scope of this review spanned several funding years, multiple incentive programs (Carl Moyer Program, Goods Movement Program, Lower Emissions School Bus Program, and Air Quality Improvement Program projects), over \$145 million in grant funds, and thousands of emission reduction projects. Through the Air District's implementation of these programs we have been able to significantly reduce emissions from mobile sources of air pollution in the Bay Area and improve air quality in our region.

Since ARB's last program review we have made great efforts to further strengthen our administrative processes and ensure that our grant programs are implemented in the most accountable, efficient and effective manner possible. We are pleased to know that the ARB Program Review Report recognizes the District's commitment to deliver high quality incentive programs as a result of these efforts. We also recognize that there is always room for improvement and we have already begun to implement the ARB recommendations regarding project file documentation and review.

I appreciate your staff's organized, transparent, and professional approach to the program review process and the ongoing support the ARB liaison team provides. We will continue to work to deliver incentive programs that are administered with the highest level of quality and look forward to our ongoing partnership with ARB on incentive programs and other air quality improvement initiatives.

Please contact Damian Breen, Deputy Air Pollution Control Officer, with any questions you may have (<u>dbreen@baaqmd.gov</u> or 415-749-5041) regarding this letter.

Sincerely,

Jack P. Broadbent

Executive Officer/APCO

ad P Broodle



# Air Resources Board

Mary D. Nichols, Chair 1001 I Street • P.O. Box 2815 Sacramento, California 95812• www.arb.ca.gov



Matthew Rodriquez
Secretary for
Environmental Protection

August 31, 2015

Mr. Jack Broadbent Executive Officer Bay Area Air Quality Management District 939 Ellis Street San Francisco, California 94109

Dear Mr. Broadbent:

The Air Resources Board (ARB) has recently concluded a review of Bay Area Air Quality Management District (District) implementation of State-sponsored incentive programs, including the Air Quality Improvement Program (AQIP), the Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program), the Goods Movement Emission Reduction Program (Goods Movement Program), and the Lower-Emission School Bus Program funded by Proposition 1B funds (School Bus Program). The scope of this review included grants made in fiscal years 2007-08 through 2013-14. A fiscal compliance audit of these programs has been conducted concurrently by the California Department of Finance, and will be provided by that Department under separate cover.

During the period of time covered by this program review, the District administered over \$145 million in State grants and matching funds to reduce emissions through the purchase of:

- 585 diesel engine replacements and/or retrofits and 6,468 old light-duty vehicles scrapped through the Carl Moyer Program
- 168 new school buses, 502 retrofits of diesel school buses and 80 compressed natural gas tank replacements through the School Bus Program
- 930 diesel retrofits, 1,223 diesel truck replacements, and 10 shore power projects through the Goods Movement Program
- 3 Technology Demonstration Projects and 411 new zero-emission lawn mowers through the AQIP

ARB's program review report is enclosed. Our review confirms that the District's incentive programs are efficiently and effectively achieving their emission reduction objectives. The review team reports no findings of District practices that are inconsistent with statute or program guidelines. We offer two recommendations in the

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: http://www.arb.ca.gov.

California Environmental Protection Agency

Mr. Jack Broadbent August 31, 2015 Page 2

enclosed report for the Carl Moyer Program, both related to program documentation. It is my understanding that District staff has already begun action to address the recommendations. The report also commends the District for development of electronic filing systems for the Carl Moyer and Goods Movement Programs, and for the effective and efficient implementation of the School Bus Program.

Under established program review guidelines, the District has 30 days from the date of this cover letter to submit a formal response, if desired, to the enclosed Program Review Report. The report and any District responses will then be posted together on ARB's website. We encourage you to also make this information public within the District.

I want to thank you and your staff for working with us through the course of this review. The District's incentive programs contribute significant and vital air quality improvements to the San Francisco Bay Area Air Basin, and provide opportunity to numerous grantees within the basin to cost-effectively reduce public exposure to diesel emissions in California.

If you have any questions about the report, please contact Mr. Scott Rowland, Branch Chief, at (626) 350-6518 or via email at <a href="mailto:Scott.Rowland@arb.ca.gov">Scott.Rowland@arb.ca.gov</a>.

Sincerely,

Richard W. Corey Executive Officer

Enclosure

cc: See next page.

Mr. Jack Broadbent August 31, 2015 Page 3

CC:

Damian Breen

Deputy Air Pollution Control Officer Bay Area Air Quality Management District 939 Ellis Street San Francisco, California 94109

Jeff McKay
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Stephanie Osaze Finance Manager Bay Area Air Quality Management District 939 Ellis Street San Francisco, California 94109

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Allan Abbs
Executive Director
California Air Pollution Control Officer's Association
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Sacramento, California 95814

Rick Sierra
Assistant Chief
Department of Finance
Office of State Audits and Evaluation

Continued next page.

Mr. Jack Broadbent August 31, 2015 Page 4

cc: (continued)

Frances Parmelee Audit Manager Department of Finance Office of State Audits and Evaluation

Robert Scott Auditor/Evaluator Department of Finance Office of State Audits and Evaluation

Scott Rowland Branch Chief Mobile Source Control Division

# **Air Pollution Reduction Incentive Programs**

# PROGRAM REVIEW REPORT

**Bay Area Air Quality Management District Fiscal Years 2007-08 through 2013-14** 

Prepared by: Air Resources Board

**Mobile Source Control Division, Incentives Oversight Section** 

August 2015

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#### 1. Introduction

The Air Resources Board (ARB) is responsible for overseeing a number of voluntary State air pollution reduction incentive programs that are implemented through California's 35 local air pollution control districts and air quality management districts (air districts), and other local agencies. As part of this oversight responsibility, ARB staff has conducted a review of the Bay Area Air Quality Management District's (Bay Area AQMD or District) incentive programs.

ARB incentive program reviews serve the public interest for transparency and accountability, helping to ensure that expenditures of State funds achieve intended outcomes and are within legal requirements. Projects are selected for review following a risk evaluation. These projects represent a percentage of the funds expended during the years within the overall scope of the review. Unless noted, issues and findings reported here pertain to the individual circumstances described and do not apply to other projects, although they may be indicative of similar issues occurring with projects not reviewed.

The Bay Area AQMD is one of the largest of California's local air districts and is responsible for air quality within the San Francisco Bay Air Basin, including Alameda County, Contra Costa County, Marin County, San Francisco County, San Mateo County, Santa Clara County, Napa County and portions of southwestern Solano and southern Sonoma Counties. The District's incentive programs are crucial components of its efforts to reduce emissions and meet requirements of Federal Clean Air Act Amendments and the California Clean Air Act.

The review that is the subject of this report was conducted between October 2014 and June 2015. ARB staff reviewed the District's implementation of the following programs:

- The Air Quality Improvement Program (AB 118) (AQIP)
- The Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program)
- The Proposition 1B Goods Movement Emission Reduction Program (Goods Movement Program)
- The Lower-Emission School Bus Program (School Bus Program)

The *Air Quality Improvement Program* was established by the California Alternative and Renewable Fuel, Vehicle Technology, Clean Air, and Carbon Reduction Act of 2007 (Assembly Bill 118) to fund clean vehicle and equipment projects that reduce criteria and toxic air pollutants. AQIP is funded by smog abatement, vehicle registration, and vessel registration fees. ARB develops statewide implementation guidelines, distributes funds to air districts, and conducts periodic oversight. Statute lists eight broad categories for project types, of which the District has implemented a Lawn and Garden

Program that encourages the replacement of gasoline-powered lawn mowers with electric lawn mowers. The District has also implemented a Technology Demonstration Program including a Locomotive Demonstration Project; this is the first ARB incentive program review to include this type of AQIP-funded project. The Bay Area AQMD (like other large and medium-sized air districts) contributes match funds as required by AQIP.

The Carl Moyer Program funds the extra capital cost of cleaner-than-required vehicles and equipment to help achieve air pollution reductions that are both early and surplus to regulations. Funds for the Carl Moyer Program come from tire replacement and vehicle registration (smog abatement) fees. ARB develops statewide implementation guidelines, distributes funds to air districts, and conducts periodic oversight. Air districts choose which project types to fund from a variety of eligible categories, including on-road and off-road vehicles and equipment, marine, shore power, locomotives, stationary agriculture pumps, emergency equipment, lawn and garden equipment, and light duty vehicle scrappage. Funded projects must achieve early or extra emission reductions not otherwise required by law or regulation. The Bay Area AQMD (like other large and medium-sized air districts) contributes match funds as required by the Carl Moyer Program.

The *Proposition 1B Goods Movement Emission Reduction Program* offers grants to owners of equipment used in freight movement to fund the purchase of cleaner technologies to reduce air pollution emissions and health risk from freight movement along California's trade corridors. The Goods Movement Program is funded by bonds authorized by Proposition 1B, and is implemented by local agencies that apply to ARB for grants to fund specific project categories. At the discretion of the implementing agency, the project categories may include heavy-duty trucks used in freight transportation through specific corridors or serving seaports or railroad intermodal transportation hubs, as well as locomotives, ships at berth, commercial harbor craft, and cargo handling equipment. ARB develops guidelines, awards grants to fund projects proposed by air districts and seaports, and conducts periodic oversight. As with the Carl Moyer Program, projects funded must achieve early or extra emission reductions that are not otherwise required by law or regulation. The Goods Movement Program does not require the District to contribute match funds toward this program.

The Lower-Emission School Bus Program helps to clean up the school buses that serve California's public schools in order to reduce the exposure of school children to diesel exhaust. The School Bus Program is funded by bonds authorized by Proposition 1B, a grant of federal Diesel Emisson Reduction Act (DERA) funds and local AB 923 funds. The program provides grants to purchase new school buses that replace older, high-emitting buses or to retrofit existing diesel bus engines with ARB-verified diesel emission control systems. ARB develops statewide implementation guidelines, distributes State and federal funds to air districts, and provides oversight of program implementation. Air districts select and fund school bus projects with public school

districts and transportation providers in their areas. The School Bus Program does not require the District to contribute match funds towards the program.

This review was conducted in accordance with ARB's policies and procedures for review of incentive programs, which are viewable at the following ARB website: <a href="http://www.arb.ca.gov/msprog/moyer/audits/audits.htm">http://www.arb.ca.gov/msprog/moyer/audits/audits.htm</a>. The scope of the review includes grant agreements between ARB and the District made in fiscal years (FY) 2007-08 through 2013-14. The review began with an entrance conference held on October 20, 2014, at the District office. The results of the program review were presented during an exit meeting held with the District on August 6, 2015.

ARB's programmatic review was supplemented by a fiscal compliance review conducted by the California Department of Finance Office of State Audits and Evaluations (Department of Finance). Department of Finance presented their observations and recommendations at a separate exit meeting on June 8, 2015, and will issue a separate report to be posted on the Department of Finance and ARB websites.

This report describes the scope of the review, the projects selected for review and site inspection, and any findings, recommendations, and commendable efforts. Under established policies and procedures for program reviews, the District has 30 days from the date of this report's cover letter to submit its comments. ARB and Department of Finance reports are posted with air district comments on ARB's Incentive Program Oversight web page, at <a href="http://www.arb.ca.gov/msprog/moyer/audits/audits.htm">http://www.arb.ca.gov/msprog/moyer/audits/audits.htm</a>.

#### 2. Overall Assessment

ARB's program review has concluded that the District's incentive programs are efficiently and effectively achieving their emission reduction objectives. A summary review of each program follows below.

#### a. Air Quality Improvement Program

The District received approximately \$1.1 million in AQIP funds in one FY within the scope of review, FY 2010-11. The largest grant was awarded for an Advanced Technology Demonstration Locomotive Project, which was selected for review. In June 2011 a grant of \$529,810 was used for the construction and demonstration of a Tier 4 GenSet switcher locomotive for use in the Richmond Pacific Railroad Company rail yard in Richmond, California. An N-ViroMotive ultra-low emission locomotive was designed and constructed by National Railway Equipment Company (NREC) to meet emission standards of 1.3 gram per brake horsepower hour (g/bhp-hr) for oxides of nitrogen and 0.03 g/bhp-hr for particulate matter. Following completion of emissions testing in May 2014, the unit was placed in service for completion of a 3,000 hour durability milestone. NREC will apply to ARB for final verification toward commercialization of this and subsequent Tier 4 GenSet locomotives in California. *ARB staff identified no findings or* 

recommendations for the District's implementation of the Air Quality Improvement Program.

#### b. Carl Moyer Program

For the FY within the scope of the review, which included 2009-10 through 2012-13, the District's Carl Moyer Program funded over 400 projects and 7,000 engines with \$43,576,225 in State and District match funding. Categories within the review scope included on-road heavy-duty vehicles, marine vessels, shore power, locomotives, off-road construction and agricultural equipment, airport ground support equipment, agricultural pumps, car scrap projects and on-road voucher incentive program projects. ARB staff identified no findings regarding the District's implementation of the Carl Moyer Program, but offers two recommendations following review of project files. The recommendations are discussed in Section 5 of this report.

#### c. Goods Movement Program

For the FY within the scope of the review, the District accepted eight Goods Movement Program grants totaling about \$90,446,625. This includes three FY 2007-08 grants for \$27,411,381.88; two FY 2008-09 grants for \$27,594,203; two FY 2011-2012 grants for \$33,417,260; and one FY 2013-2014 grant for \$2,023,780. The District reports that the FY 2007-08 grants funded the replacement of 401 heavy-duty diesel trucks, the installation of ARB-certified Level-3 Retrofit devices on 902 diesel trucks, and three shore power projects. The FY 2008-2009 shore power grant funded nine shore power projects. The combined FY 2008-2009 and FY 2011-12 truck grants funded the replacement of 348 heavy-duty diesel trucks and the installation of ARB-certified Level-3 Retrofit devices on 28 diesel trucks. The FY 2011-2012 drayage grant funded the replacement of 357 heavy-duty diesel drayage trucks and the FY 2013-2014 grants are expected to fund the replacement of 316 heavy-duty diesel trucks. *ARB staff identified no findings or recommendations for the District's implementation of the Goods Movement Program*.

#### d. School Bus Program

A FY 2007-08 Proposition 1B grant of \$8,523,208 and a FY 2008-09 DERA grant of \$382,000 enabled the District to fund, during the FY within the scope of this review, 168 school bus replacements, 502 retrofits, and 80 compressed natural gas (CNG) tank replacements, for a total of 750 projects. FY 2009-10 through 2012-13, local AB 923 funds of \$27,796,911 were used to fund school bus projects. This met School Bus Program goals for the District and reduced exposure to diesel exhaust for thousands of Bay Area school children. *ARB staff identified no findings or recommendations for the District's implementation of the LESBP projects.* 

#### 3. Scope of the Program Review

The scope of the review covered the District's implementation of incentive programs associated with grants awarded from FY 2007-08 through 2013-14. Scope varies somewhat by program, as discussed below.

#### a. Air Quality Improvement Program

The District received funding for four AQIP projects for FY 2010-11. A Lawn and Garden Equipment Replacement Project delivered emission benefits by providing funds to aid consumers in replacing higher polluting gasoline mowers with cordless, zero-emission mowers. A Wind Assist Marine Demonstration Project was commissioned to analyze whether wind conditions used daily by commercial sail boat operators on the San Francisco Bay can be used to decrease the emissions and fuel consumption of ferry systems. A Demonstration of Tier 4 PM Emission Controls for Ultra Low-Emitting Locomotive Project was also funded, in addition to the locomotive project described in the previous section. Table 1 lists the projects and administration funding that the District received to implement the AQIP projects, as well as the District's match funding commitment.

	Table 1: Fiscal Year 2010-11 AQIP Grants <sup>1</sup>							
Grant Number	Project Name	Project	Administration	Total Grant	Matching Funds	Total		
G10-AQIP-07	Lawn & Garden Equipment Replacement Project	\$165,643.00	\$16,382.00	\$182,025.00	\$182,025.00	\$364,050.00		
G10-AQIP-11	Wind Assist Marine Demonstration for Ferry Districts on San Francisco Bay	\$164,250.20	\$0.00	\$164,250.20	\$164,250.20	\$328,500.40		
G10-AQIP-12	Demonstration of Tier 4 PM Emission Control of Ultra Low-Emitting Locomotive	\$229,830.00	\$0.00	\$229,830.00	\$229,830.00	\$459,660.00		
G10-AQIP-13	Construction & Demonstration of a Tier 4 Gen Set Locomotive	\$529,810.00	\$0.00	\$529,810.00	\$1,208,588.00	\$1,738,398.00		
Total		\$1,089,533.20	\$16,382.00	\$1,105,915.20	\$1,784,693.20	\$2,890,608.40		
<sup>1</sup> Interest earned by	<sup>1</sup> Interest earned by the District is not included in table.							

#### b. Carl Moyer Program

For the Carl Moyer Program, the scope of the review covered grants awarded in FY 2009-10 through 2012-13. Project categories within the review scope included on-road heavy-duty vehicles, marine vessels, locomotives, off-road construction and agricultural equipment, airport ground support equipment, agricultural pumps, and car scrap. Table 2 lists the project and administration funding granted to the District by FY (including Multi-district funds), and the District's match funding commitment for each year's grant.

Table 2: Carl Moyer Program Funds <sup>1</sup>								
Fiscal Year	Grant Number	Project	Administration	Total Grant	Matching Funds <sup>2</sup>	Total		
			Carl Moyer P	rogram				
2009-10	G09-M003	\$8,207,151	\$431,955	\$8,639,106	\$1,295,866	\$9,934,972		
2010-11	G10-M004	\$7,668,499	\$403,605	\$8,072,104	\$1,210,816	\$9,282,920		
2011-12	G11-M003	\$8,297,495	\$436,710	\$8,734,205	\$1,310,131	\$10,044,336		
2012-13	G12-M003	\$6,819,109	\$358,901	\$7,178,010	\$1,076,702	\$8,254,712		
To	otal	\$30,992,254	\$1,631,171	\$32,623,425	\$4,893,515	\$37,516,940		
		Car	l Moyer Program	-Multi-Distric	t			
2009-10	G09-M032	\$604,745	\$31,829	\$636,574	-	\$636,574		
2010-11	G10-M033	\$1,190,277	\$62,646	\$1,252,923	-	\$1,252,923		
2011-12	G11-M033	\$1,129,389	\$59,442	\$1,188,831	-	\$1,188,831		
2012-13	G12-M035	\$2,831,909	\$149,048	\$2,980,957	-	\$2,980,957		
To	<b>Total</b> \$5,756,320		\$302,965	\$6,059,285		\$6,059,285		
		t is not included in ta ement for the Multi-I						

#### c. Goods Movement Program

For the Goods Movement Emission Reduction Program the scope of the review covered grant funding cycles for FY 2007-08, 2008-09, 2011-12, and 2013-14. Project categories within the review scope included heavy-duty diesel trucks, drayage trucks, and shore power projects. Table 3 lists the project and administration grant amounts for the District.

Table 3: Goods Movement Program Grants <sup>1</sup>							
Fiscal Year	Grant Number	Grant Name	Project	Administration	Total Grant		
2007-2008	G07GMBT1	Heavy Duty Trucks	\$9,964,000.00	\$498,200.00	\$10,462,200.00		
2007-2008	G07GMBP1	Drayage Trucks	\$13,835,135.00	\$691,756.00	\$14,526,891.00		
2007-2008	G07GMBS1	Shore Power/ Ships at Berth	\$2,374,795.00	\$47,495.88	\$2,422,290.88		
2008-2009*	G08GMBT1	Heavy Duty Trucks	\$7,232,574.00	\$361,629.00	\$7,594,203.00		
2008-2009	G08GMBS1	Shore Power/ Ships at Berth	\$19,417,476.00	\$582,524.00	\$20,000,000.00		
2011-2012*	G11GMBT1	Heavy Duty Trucks	\$22,005,962.00	\$1,100,298.00	\$23,106,260.00		
2011-2012	G11GMBP1	Drayage Trucks	\$9,820,000.00	\$491,000.00	\$10,311,000.00		
2013-2014*	G13GMBT1	Heavy Duty Trucks	\$1,927,410.00	\$96,370.00	\$2,023,780.00		
Total			\$86,577,352.00	\$3,869,272.88	\$90,446,624.88		
<sup>1</sup> Interest earned by the District is not included in table.							

<sup>\*</sup>ARB combined the FY 2008-09 and FY 2011-12 grants for the truck projects because these grants covered projects from the same statewide solicitation and the same ranked lists, although the funds are from different FY appropriations. Additionally, the information for the FY 2013-14 truck projects includes funds reallocated from the FY 2011-12 grant that were not utilized due to project fallout.

#### d. School Bus Program

For the Lower-Emission School Bus Program, the review scope covered funding cycles for a FY 2007-08 Proposition 1B grant, a 2009 DERA grant, and Lower-Emission School Bus local AB 923 funds for FY 2009-10 through 2012-13. Table 4 lists the School Bus Program grants the District implemented during the scope of the review.

Table 4: Lower-Emission School Bus Grants <sup>1</sup>					
2007-08 Pro	position 1B Lower-Emiss	ion School Bus Program			
Grant Number	Project	Administration	Total Grant		
G07-SB03	\$8,084,314	\$438,894	\$8,523,208		
2009	DERA Lower-Emission	School Bus Grant			
Grant Number	Project	Administration	Total Grant		
G08-DERA-03	\$355,260	\$26,740	\$382,000		
2009-10 throug	h 2012-13 AB 923 Lower-l	Emission School Bus Fu	nds		
AB 022 Fde	Project	Administration <sup>2</sup>	Total Funds		
AB 923 Funds	\$27,796,911	-	\$27,796,911		
Total	\$36,236,485	\$465,634	\$36,702,119		

<sup>&</sup>lt;sup>1</sup>Interest earned by the District is not included in table.

#### 4. Project Selection and Review

In choosing specific projects for review, ARB staff considered the diversity of project types funded by the District within the scope of the program review. The funding sources considered in selecting the review sample included all grant and match funds listed in Tables 1 through 4 above, as well as the interest earned on those grant funds and expended on projects.

The District also used \$2 Assembly Bill 923 motor vehicles fees to fund projects (match and non-match) during the time period covered by the review. Such projects were considered in selecting the review sample and one project was selected for review that was partially match-funded. ARB did not select or evaluate any non-match \$2 Assembly Bill 923 funded projects and is not issuing a separate report for AB 923 projects.

Below is an overview of projects within the scope for each program. The projects selected for review and inspection is shown in Appendix Tables 1 - 4.

#### a. Air Quality Improvement Program

As discussed in Sections 2 and 3, four AQIP project grants were made to the District in FY 2010-11, as shown in Table 1. The project funded by the largest grant was selected for full file review; no AQIP projects were selected for inspection.

<sup>&</sup>lt;sup>2</sup>Some AB 923 funds reported were used to co-fund Proposition 1B projects. Up to 5 percent of AB 923 funds are used for administrative costs. Administrative costs are not included in table

#### b. <u>Carl Moyer Program</u>

Table 5 summarizes the source categories funded and the number of engines and projects funded for each Moyer Program fund source within the scope of the review. Because projects often include multiple engines, engines are shown in the table along with the total number of projects by source category. The review team selected twelve projects for full file review. Following the file review and based on its results, the review team selected 3 projects for inspection in the field as shown in Table A2 of the Appendix.

Table 5: Carl Moyer Program Engines and Projects <sup>1</sup>							
E d		2009-10	2010-11	2011-12	2012-13	To	otal
Fund Source	Source Category	Engines	Engines	Engines	Engines	Engines	Projects
	On-Road Voucher Incentive Program	0	0	12	0	12	12
	Off-Road Equipment - Other	2	4	4	7	17	7
	Off-Road Equipment - Mobile Agricultural	49	96	26	92	263	157
	Airport Ground Support Equipment	0	0	0	3	3	1
Carl Moyer Program	Off-Road Equipment - Construction	11	13	8	5	37	19
riogram	Marine Vessels	25	42	8	8	83	36
	Locomotives	4	0	1	0	5	2
	On-Road Heavy-Duty Vehicles	0	1	0	0	1	1
	Car Scrap	0	43	2,796	0	2,839	2
Carl Moyer Program -	On-Road Voucher Incentive Program	20	34	32	75	161	161
Multi District	On-Road Heavy-Duty Vehicles	2	0	0	0	2	2
Match	Off-Road Equipment - Mobile Agricultural	0	0	1	0	1	0
	Car Scrap	918	858	980	873	3,629	3
<sup>1</sup> Drojects or one	Total  gines with more than one funding year were ass	1,031	1,091	3,868	1,063	7,053	403

c. Goods Movement Program

Source of Data: Carl Moyer Program Clean Air Reporting Log (CARL) database query April 24, 2015.

Table 6 summarizes Goods Movement Program grants, with the number of truck retrofit, truck replacement, and shore power projects funded, as of the entrance conference held on October 20, 2014. The review team selected 26 funded projects for full file

review. Following the file review and based on its results, the review team selected two projects for inspection in the field, as shown in Table A3 of the Appendix.

Table 6: Goods Movement Program Projects Ranked and Funded						
Grant Number Grant Name	Retrofits	Replacement Diesel	Shore Power	Total Projects		
G07GMBT1 Heavy Duty Trucks	13	198	0	211		
G07GMBP1 Drayage Trucks	889	203	0	1,092		
G07GMBS1 Shore Power	0	0	3	3		
G08GMBT1/ G11GMBT1* Heavy Duty Trucks	28	348	0	376		
G08GMBS1 Shore Power	0	0	9	9		
G11GMBP Drayage Trucks	0	357	0	357		
G13GMBT1* Heavy Duty Trucks	0	118	0	118		
Total	930	1,224	12	2,166		

<sup>\*</sup> ARB combined the FY 2008-09 and FY 2011-12 grants for the truck projects because these grants covered projects from the same statewide solicitation and the same ranked lists, although the funds are from different FY appropriations. Additionally, the information for the FY 2013-14 truck projects includes funds reallocated from the FY 2011-12 grant that were not utilized due to project fallout.

#### d. School Bus Program

Table 7 summarizes School Bus Program project types, the number of projects, and individual buses funded by the District within the scope of the review. Projects were selected for review to include the different sources of funding and three types of projects: retrofits of school bus diesel engines, replacements of old school buses, and replacements of school bus CNG tanks. The review team selected four projects for full review. Following the file review and based on its results, the review team selected two projects for inspection in the field, as shown in Table A4 of the Appendix.

Table 7: Lower-Emission School Bus Program Projects and Number of Buses Funded <sup>1</sup>							
Grant Number Grant Name	Project Type	Retrofits	Replacements	CNG Tank Replacements	Total		
Fiscal Year 2007-2008	Buses	297	22	0	319		
Proposition 1B Projects <sup>2</sup> G07-SB03	Projects	33	7	0	40		
Fiscal Year 2008-2009	Buses	18	0	0	18		
DERA Projects G08-DERA-03	Projects	3	0	0	3		
Fiscal Year 2009-2010	Buses	187	146	80	413		
through 2013-2014 AB 923 Projects <sup>3</sup>	Projects	13	38	13	64		
Total	Buses	502	168	80	750		
Total	Projects	49	45	13	107		

<sup>&</sup>lt;sup>1</sup> Each contract with a public school or transportation provider is counted as a project; one project may include multiple buses.

#### 5. Review Findings and Recommendations

"Findings" are district practices found to be inconsistent with one or more of the items below. "Conditions" are detailed descriptions of district practices that resulted in findings as revealed by the review. "Required Actions" are minimum actions a district must take to mitigate the findings.

- State requirements including those under Health and Safety Code sections as follows:
  - 39625 through 39627.5—Goods Movement Program.
  - 44275 through 44299.2—Carl Moyer Program.
  - 44299.90 through 44299.91—School Bus Program.
- Governor's Executive Order S-02-07.
- Carl Moyer Program 2008 Guidelines (April 21, 2008), and Carl Moyer Program 2011 Guidelines (December 31, 2014) (http://www.arb.ca.gov/msprog/moyer/guidelines/current.htm).
- Lower-Emission School Bus Program Guidelines (2006 and newer versions) (<a href="http://arb.ca.gov/bonds/schoolbus/guidelines/2008lesbp.pdf">http://arb.ca.gov/bonds/schoolbus/guidelines/2008lesbp.pdf</a>).
- Carl Moyer and School Bus Program advisories, Mail-outs, and other written communications.
- Carl Moyer and School Bus Program Grant Award and Authorization requirements.
- Goods Movement Program Local Agency Grant Agreements.

<sup>&</sup>lt;sup>2</sup> Current as of November 6, 2014 (from Proposition 1B bond database).

<sup>&</sup>lt;sup>3</sup> Some AB 923 funds reported were used to co-fund Proposition 1B projects

- Goods Movement Program Guidelines
   (http://www.arb.ca.gov/bonds/gmbond/docs/prop\_1b\_goods\_movement\_2013\_program\_guidelines\_for\_implementation.pdf)
- District policies and procedures and forms, including contracts with the engine owners/grant recipients.

ARB staff identified no findings for the District's implementation of incentive programs, from either file review or project inspections.

ARB staff may offer "Recommendations" when district practices are found to be consistent with the items above and mitigation is not required, but a change in practices would improve program effectiveness, efficiency, or transparency. Following completion of project file reviews for the Carl Moyer Program, ARB staff offers the two recommendations below. No recommendations were identified from project inspections.

- Development of additional project file procedures may ensure their completeness. For three reviewed project files, reviewing staff found instances of incomplete information that required follow-up. All three occurrences were corrected completely by the District as soon as they learned of them, and District staff entered a recalculation of emission reductions into the CARL database when they were made aware of the need.
- 2. Use of a more detailed breakdown of project costs in staff project evaluations would reduce risk of including ineligible costs. One project file was found to be missing information needed to determine whether an ineligible cost had been included in the cost-effectiveness calculation. Once additional information was obtained, an ineligible cost was found to have been included in staff's evaluation. District staff later identified the error in a submitted invoice, and only eligible costs were paid.

The District has responded and acknowledged these recommendations indicating their intent to augment their internal procedures document with additional detail on determining eligible costs as part of the application review process. The District has also provided their administrative operating procedures pertaining to file construction and routing, developed to ensure file completeness.

Note that the results of the Department of Finance's independent fiscal review will be included in their report, to be posted on the ARB's incentive program review website at: <a href="http://www.arb.ca.gov/msprog/moyer/audits/audits.htm">http://www.arb.ca.gov/msprog/moyer/audits/audits.htm</a>.

#### 6. Commendable Efforts

A commendable effort is an exceptional practice that goes beyond the basic requirements for implementing incentive programs. ARB commends the District for successful development of electronic filing systems for the Carl Moyer Program and Goods Movement Emissions Reduction Program, which enable efficient and accurate retrieval of program and project information. The District's structure and attention to detail in creating the filing system assisted the Program Review process, due to the ease of reviewing detailed information contained in the project files. In addition, ARB commends the District for the completeness of its LESBP project files and its effective and efficient administration of the program.

ARB commends the District for quickly implementing and funding from May through December 2012 the replacement of over 350 drayage trucks with much cleaner equipment. The District was required to quickly implement this project to achieve early emission reductions ahead of Phase 2 of the Drayage Truck Regulation. This was in addition to the implementation and funding of their heavy-duty truck grant.

#### 7. Resources

- Air Resources Board Lower-Emission School Bus website, http://www.arb.ca.gov/msprog/schoolbus/schoolbus.htm
- 2. Air Resources Board Carl Moyer Program website, http://www.arb.ca.gov/msprog/moyer/moyer.htm
- 3. Air Resources Board Goods Movement Emissions Reduction Program website, http://www.arb.ca.gov/bonds/gmbond/gmbond.htm
- Air Resources Board Incentives Program Audit and Program Reviews website (includes previous reports and Policies and Procedures) http://www.arb.ca.gov/msprog/moyer/audits/audits.htm
- 5. Lower-Emission School Bus 2008 Guidelines (April 15, 2008), Air Resources Board
- 6. Lower-Emission School Bus 2006 Guidelines (March 2, 2006), Air Resources Board
- 7. Carl Moyer Program 2005 Guidelines (January 6, 2006), Air Resources Board
- 8. Carl Moyer Program 2008 Guidelines (April 21, 2008), Air Resources Board
- 9. Carl Moyer Program 2011 Guidelines (December 31, 2014), Air Resources Board
- 10. Proposition 1B: Goods Movement Emission Reduction Program, Final 2013 Guidelines for Implementation (January 25, 2013)
- 11. Governor's Executive Order S-02-07

# Appendix

Table A1 Project ReviewedAir Quality Improvement Program						
Grantee	Contract Number	Project Inspected by ARB				
Bay Area Air Quality Management District - Construction & Demonstration of a Tier 4 Gen Set Locomotive	G10-AQIP-13	No				

Table A2
Projects Reviewed---Carl Moyer Program

Fiscal Year	Project Number	Grantee	Source Category	Project Inspected by ARB (√)
2009-10	11MOY44	California Department of Transportation	Locomotives	V
2009-10	11MOY46	APL Maritime Services Ltd	Marine Vessels	
2009-10	12MOY36	Marin Sanitary Service	Off-Road Equipment - Other	√
2010-11	13MOY69	Sonoma-Cutrer Vineyards, Inc.	Off-Road Equipment– Mobile Agricultural	
2010-11	13MOYFA1	City of Sunnyvale	On-Road Heavy Duty Vehicles	
2010-11	2008-208a	Thomas Ecklund (Environmental Engineering Studies, Inc.)	Car Scrap	
2011-12	14MOY40	Jerico Products Inc	Marine Vessels	$\checkmark$
2011-12	1XPCDB9X8YD511200	Manual Gamboa	On-Road Voucher Incentive Program	
2011-12	2013.118	Javiera A. Lacayo (Pick N Pull)	Car Scrap	
2011-12 and 2012-13	12MOY94	Poncia Fertilizer Spreading	Off-Road Equipment– Mobile Agricultural	
2012-13	12MOY133	Dominus Estate Corporation	Off-Road Equipment– Mobile Agricultural	
2012-13	15MOY01	Sanco Pipelines Inc	Off-Road Equipment– Construction	

# Table A3 Projects Reviewed---Goods Movement Program

	Grant	ARB Project ID	Grantee	Project Type	Project Inspected by ARB (√)
1	G07GMBP1	G07GMBP1_00159	Devine Intermodal	Replacement	
2	G07GMBP1	G07GMBP1_00124	Ning Zhang	Replacement	
3	G07GMBP1	G07GMBP1_00836	Raul A. Rivas	Retrofit	
4	G07GMBP1	G07GMBP1_01394	Pargat Singh / Pritam Singh	Retrofit	
5	G07GMBT1	G07GMBT1_00045	Harpinder Singh Chauhan	Replacement	
6	G07GMBT1	G07GMBT1_00310	Lawson Drayage, Inc.	Retrofit	
7	G07GMBT1	G07GMBT1_00243	Lee Financial Services Lessorr. Gardner Trucking Inc. Lessee.	Replacement	V
8	G07GMBS1	G07GMBS1_00001	Eagle Marine Services	Grid Based	
9	G08GMBT1	G08GMBT1_00859	David Bass /EZ Transportation	Retrofit	
10	G08GMBT1	G08GMBT1_00406	Royal Trucking	Replacement	
11	G08GMBT1	G08GMBT1_00276	Silicon Roadways	Replacement	
12	G08GMBT1	G08GMBT1_00584	Ricky Lok	Replacement	
13	G08GMBS1	G08GMBS1_00010	Ports America Outer Harbor Terminal, LLC	Grid Based	
14	G08GMBS1	G08GMBS1_00008	Port of Oakland	Grid Based	
15	G11GMBP1	G11GMBP1_00544	Gudy Ardany Linarez	Replacement	
16	G11GMBP1	G11GMBP1_00788	Ed Rocha Livestock, Trans Inc.	Replacement	$\sqrt{}$
17	G13GMBT1	G13GMBT1_00140	Frank Ghiglione, Inc. dba Rodgers Trucking	Replacement	
18	G13GMBT1	G13GMBT1_00033	United Parcel Service	Repower	
19	G13GMBT1	G13GMBT1_00126	Antioch Building Materials	Replacement	
20	G13GMBT1	G13GMBT1_00214	San Mateo Lumber Company	Replacement	
21	G13GMBT1	G13GMBT1_00330	Carlos S. Sanchez dba Sanchez Trucking	Replacement	
22	G13GMBT1	G13GMBT1_00539	Advanced Cargo, Inc.	Replacement	
23	G13GMBT1	G13GMBT1_00147	Assured Aggregates Co., Inc.	Replacement	
24	G13GMBT1	G13GMBT1_00107	Challenge Dairy Products, Inc.	Replacement	
25	G13GMBT1	G13GMBT1_00103	Gonzalez Pallets, Inc.	Replacement	
26	G13GMBT1	G13GMBT1_00333	Economy Lumber Company of Oakland	Replacement	

# Table A4 Projects Reviewed—Lower-Emission School Bus Program

	Fiscal Year	Project Number	Grantee	Project Type	Projects Inspected by ARB (√)
1	2009-10	08SBPM10	San Lorenzo Unified School District	Retrofit	
2	2011-12	08LESBP48	Mount Diablo Unified School District	School Bus Replacement	
3	2012-13	12SBTR07	San Ramon Unified School District	Compressed Natural Gas Tank Replacement	
4	2013-14	08SBPM24	First Student, Inc.	Retrofit	$\sqrt{}$

#### BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Scott Haggerty and Members

of the Mobile Source Committee

From: Jack P. Broadbent

Executive Officer/APCO

Date: November 20, 2015

Re: Fiscal Year Ending (FYE) 2014 Transportation Fund for Clean Air (TFCA) Audit

Report Results and FYE 2015 Report on TFCA Regional Fund Expenditures and

Effectiveness

#### RECOMMENDED ACTION

None. Informational item only, receive and file.

#### **BACKGROUND**

In 1991, the California State Legislature authorized the Bay Area Air Quality Management District (Air District) to impose a \$4 surcharge on motor vehicles registered within the nine-county Bay Area to fund projects that reduce on-road motor vehicle emissions. Since 1992, the Air District has allocated these funds to its TFCA Program to fund eligible projects. The statutory authority for the TFCA and requirements of the program are set forth in California Health and Safety Code (HSC) Sections 44241 and 44242.

Sixty percent of TFCA funds are awarded by the Air District to eligible programs and projects implemented directly by the Air District (e.g., the Smoking Vehicle, Enhanced Mobile Source Enforcement, Spare the Air, and Bicycle Facility Programs) and through a grant program known as the Regional Fund. The remaining 40% of TFCA funds are forwarded to a designated agency within each Bay Area county to be distributed via the County Program Manager Fund. HSC Section 44242 requires that the Air District conduct an audit of every program and project funded with TFCA monies, at least once every two years. The Air District conducts audits of Regional Fund projects annually and County Program Manager Fund projects biennially.

On February 18, 2015, the Air District's Board of Directors (Board) approved the award of a contract to Gilbert Associates, Inc. (Gilbert) for audit services, including a financial and compliance review of TFCA funded projects and programs. The first audit to be conducted under this contract is Audit # 16, which covers Regional Fund and Air District-lead projects that were paid all awarded funds (closed out) by June 30, 2014.

In addition, HSC Section 44241 requires that the Board hold a public hearing each year to review the Air District's expenditure of TFCA funds to determine their effectiveness in improving air quality.

#### DISCUSSION

#### TFCA Audit #16

For Audit #16, Gilbert Associates, Inc. conducted financial and compliance audits of TFCA Regional Fund and Air District-sponsored program projects that were closed out between July 1, 2013 and June 30, 2014.

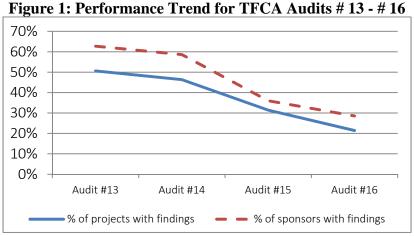
Gilbert conducted field work from June 2015 through October 2015 and issued a draft audit report to each of the agencies and companies (Project Sponsors) that were part of Audit #16. Each Project Sponsor was then provided an opportunity to respond in writing to any findings and those responses are included in the final individual audit reports.

The Audit #16 summary report is currently being finalized; however, staff has received notice of the auditor's findings, which are as follows:

- Project Sponsors for five projects submitted one or more late report (e.g., semiannual, annual monitoring); and
- One Project Sponsor failed to submit an annual monitoring report by the date of the audit.

Although Audit #16 contains two findings, the results reflect an overall improvement in Project Sponsor's adherence to program and contractual requirements. Over the last five years, the Air District has taken significant steps to improve and strengthen its administrative processes, and consequently more recent projects have shown an improvement in adherence to program and contractual requirements.

Figure 1 below shows the performance trend of the most recent four TFCA audits.



The Audit Summary Report will be presented to the committee at the Mobile Source Committee meeting on December 2, 2015. The report contains a list of all of the projects and programs that were audited as part of Audit #16 (in Appendix B) and a summary of findings from the individual audit reports. A discussion of the audit process, results, and the additional steps that Air District staff is taking to ensure compliance with program requirements will also be presented at the Committee meeting.

#### **Report on Regional Fund Expenditures and Effectiveness**

The report on expenditures and effectiveness of TFCA Regional Fund and Air District-sponsored programs that concluded in FYE 2015 (fully paid and closed-out) is provided in Attachment 2.

The following are the key findings of the report:

- TFCA funds were allocated to eligible projects and programs, consistent with the legislation that authorizes the TFCA program.
- The TFCA expenditures for projects and programs that concluded in FYE 2015, and administrative costs totaled \$7.63 million. This includes \$3.40 million in Regional Fund projects, \$3.46 million in Air District-sponsored programs, and \$765,101 in administrative and indirect costs.
- These projects and programs reduced criteria pollutant emissions over their lifetimes by an estimated 124.8 tons, including 27.70 tons of reactive organic gases (ROG), 62.72 tons of nitrogen oxides (NOx), and 34.35 tons of particulate matter (PM10). The lifetime reduction of carbon dioxide (CO2), a greenhouse gas, is estimated to be over 62,717 tons.
- These projects and programs achieved a combined (average) cost-effectiveness of \$49,545 per ton of criteria pollutant emissions reduced.

A discussion of the expenditures, emission reductions, and cost-effectiveness of the TFCA Regional Fund and Air District-sponsored programs and projects that closed in FYE 2015 will be presented to the Mobile Source Committee.

#### BUDGET CONSIDERATION/FINANCIAL IMPACT

None. As required by California Health and Safety Code Section 44242(a), the costs of TFCA audits are taken from the TFCA motor vehicle registration fee surcharges. Resources for Audit #16 were identified in the Air District's FYE 2015 budget.

#### Respectfully submitted,

Jack P. Broadbent Executive Officer/APCO

Prepared by: Ken Mak and Linda Hui

Reviewed by: Chengfeng Wang and Karen Schkolnick

Attachment 1: TFCA Audit Summary Report #16; to be presented on December 2, 2015 Attachment 2: TFCA Report on Expenditures and Effectiveness of Regional Fund and Air

District-sponsored programs and projects closing in FYE 2015



## BAY AREA AIR QUALITY MANAGEMENT DISTRICT

TRANSPORTATION FUND FOR CLEAN AIR (TFCA)

# REPORT ON EXPENDITURES AND EFFECTIVENESS OF REGIONAL FUND AND AIR DISTRICTSPONSORED PROGRAMS AND PROJECTS CLOSING IN FISCAL YEAR ENDING (FYE) 2015

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## THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

The California Legislature created the Bay Area Air Quality Management District (Air District) in 1955 as the first regional air pollution control agency in the country, recognizing that air emissions overflow political boundaries. The nine counties of the San Francisco Bay Area form a regional air basin, sharing common geographical features and weather patterns, and therefore similar air pollution burdens, which cannot be addressed by counties acting on their own.

The Air District is the public agency entrusted with regulating stationary sources of air pollution in the nine counties that surround San Francisco Bay: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, southwestern Solano, and southern Sonoma counties.

#### **BACKGROUND**

On-road motor vehicles, including cars, trucks, and buses, constitute the most significant source of air pollution in the San Francisco Bay Area. Vehicle emissions contribute to unhealthful levels of ozone (summertime "smog"), particulate matter, and greenhouse gases. Because of this, emission reductions from the on-road transportation sector are essential to helping the Bay Area attain State and Federal ambient air quality standards and meet greenhouse gas reduction commitments.

To protect public health, the State Legislature enacted the California Clean Air Act in 1988. As part of the requirements, the Air District prepared the 2010 Clean Air Plan (CAP) which includes transportation control measures (TCMs), defined as "any strategy to reduce vehicle trips, vehicle use, vehicle miles traveled, vehicle idling, or traffic congestion for the purpose of reducing motor vehicle emissions," and mobile source measures (MSMs), which encourage the introduction of newer, cleaner motor vehicle technologies and the retirement of older, more polluting vehicles.

## THE TRANSPORTATION FUND FOR CLEAN AIR (TFCA)

In 1991, the California State Legislature authorized the Air District to impose a \$4 surcharge on motor vehicles registered within the San Francisco Bay Area to fund projects that reduce on-road motor vehicle emissions. The Air District has allocated these funds to its Transportation Fund for Clean Air (TFCA) to fund eligible projects. The statutory authority for the TFCA and requirements of the program are set forth in California Health and Safety Code Sections 44241 and 44242.

Sixty percent of TFCA funds are awarded by the Air District's Board of Directors to eligible programs and projects implemented directly by the Air District (e.g., the Enhanced Mobile Source Inspections/Smoking Vehicle, Vehicle Buy-Back, Spare the Air, and Bicycle Facility Programs) and through a grant program known as the Regional Fund. The remaining forty percent of TFCA funds are forwarded to a designated agency within each Bay Area county to be distributed via the County Program Manager Fund.

Each year, the Air District Board of Directors adopts criteria for the evaluation and ranking of project applications for the TFCA Program. Cost-effectiveness, expressed in terms of TFCA dollars per ton of reduced emissions, is the most important criterion for ranking projects.

In addition to reducing air pollution, including toxic particulate matter, TFCA-funded projects have other benefits including the following:

- Conserving energy and helping to reduce emissions of carbon dioxide (CO2), a greenhouse gas;
- Reducing traffic congestion;
- Improving quality of life for its residents and commuters by expanding access to services that provide first and last-mile connections to rail, ferry, and mass transit; and
- Improving physical fitness and public safety by facilitating pedestrian and other car-free modes of travel.

#### State legislation restricts TFCA funding to the following 11 types of projects:

- Implementation of ridesharing programs
- Clean fuel school and transit bus purchases or leases
- > Feeder bus or shuttle service to rail and ferry stations and to airports
- > Arterial traffic management
- Rail-bus integration and regional transit information systems
- Demonstrations in congestion pricing of highways, bridges and public transit
- Low-emission vehicle projects
- Smoking vehicles program
- Vehicle buy-back scrappage program
- Bicycle facility improvement projects
- Physical improvements that support "smart growth" projects

This report summarizes the expenditures and effectiveness of the TFCA Regional Fund projects and Air District-sponsored programs that concluded during fiscal year ending (FYE) 2015.

#### **Key Highlights**

- TFCA funds were allocated to eligible projects and programs, consistent with the legislation that authorizes the TFCA program.
- The TFCA expenditures for projects and programs that concluded in FYE 2015, and administrative costs totaled \$7.63 million. This includes \$3.40 million in Regional Fund projects, \$3.46 million in Air District-sponsored programs, and \$765,101 in administrative and indirect costs.
- These projects and programs reduced criteria pollutant emissions over their lifetimes by an estimated 124.8 tons, including 27.70 tons of reactive organic gases (ROG), 62.72 tons of nitrogen oxides (NOx), and 34.35 tons of particulate matter (PM10). The lifetime reduction of carbon dioxide (CO2), a greenhouse gas, is estimated to be over 62,717 tons.
- These projects and programs achieved a combined weighted average cost-effectiveness of \$49,545 per ton of criteria pollutant emissions reduced.

#### EXPENDITURES

The TFCA expenditures for projects and programs that concluded in FYE 2015, and administrative costs totaled \$7.63 million. This total includes \$3.46 million for the programs administered directly by the Air District and \$3.40 million in Regional Fund grants to other organizations. In addition, the Air District expended \$765,101 in administrative and audit costs associated with the oversight of these projects and programs. Appendix A lists expenditure details.

A summary of the expenditures for the TFCA Regional Fund projects and Air District-sponsored programs that concluded in FYE 2015 is shown in **Figure 1**.

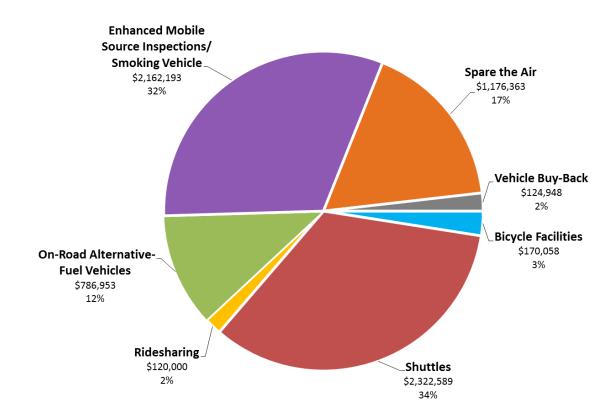


Figure 1. Expenditures for Projects and Programs Closing in FYE 2015

#### **EFFECTIVENESS**

The cost-effectiveness of TFCA projects and programs is calculated by dividing the TFCA funds allocated or awarded by the lifetime criteria pollutant emissions reductions (ROG,  $NO_x$ , and weighted  $PM_{10}$  combined). The result is TFCA dollars per ton of reduced emissions.

Projects and programs concluding in FYE 2015 are anticipated to reduce criteria pollutant emissions over their lifetimes by an estimated total of 124.8 tons. This total is the sum of ozone precursors (27.70 tons of ROG and

<sup>&</sup>lt;sup>1</sup> In FYE 2015, total TFCA revenues, for both the Regional Fund and County Program Manager Fund, were \$23.93 million. Administrative and audit costs across both programs totaled \$1.28 million.

62.72 tons of  $NO_x$ ) and particulate matter (34.35 tons of  $PM_{10}$ ). The lifetime reduction of  $CO_2$  is estimated to be over 62,717 tons.<sup>2</sup>

The Regional Fund projects and Air District-sponsored programs that concluded in FYE 2015 achieved a combined weighted-average cost-effectiveness of \$49,544.51 per ton of criteria pollutant emissions reduced.

A summary of expenditures, emission reductions, and cost-effectiveness values by program category is provided in **Table 1**.

Table 1: Emission Reductions and Cost-Effectiveness (C/E) by Program Category for Projects and Programs Concluding in FYE 2015

Category	# of Projects	TFCA \$ Expended	% of TFCA \$ Expended	Emissions Reduced (tons) <sup>a</sup>	% of Emissions Reduced	C/E - Weighted (\$/ton) <sup>b</sup>
Bicycle Facilities	17	\$170,058	2.48%	1.84	1%	\$90,000°
Shuttles	6	\$2,322,589	33.84%	20.57	16%	\$95,398 <sup>d</sup>
Ridesharing	1	\$120,000	1.75%	4.33	3%	\$18,794
On-Road Alternative-Fuel Vehicles	2	\$786,953	11.47%	23.55	19%	\$86,354
Enhanced Mobile Source Inspections/ Smoking Vehicle Program	1	\$2,162,193	31.50%	4.55	4%	\$307,739
Spare the Air Program	1	\$1,176,363	17.14%	69.93	56%	\$17,612
Vehicle Buy-Back Program	1	\$124,948 <sup>e</sup>	1.82%	-	-	-
Total for Projects and Programs <sup>f</sup>	29	\$6,863,104	100%	124.77	100%	\$49,545
Administration		\$765,101				

<sup>(</sup>a) Lifetime emission reductions of ROG,  $NO_x$ , and  $PM_{10}$  combined.

Three of the 29 projects and programs listed in Table 1 achieved lower-than-originally-estimated emissions reductions. The following sections provide further analysis of those programs and projects that achieved lower-than-originally-estimated emissions reductions: the Enhanced Mobile Source Inspection/Smoking Vehicle Program and two shuttle projects.

#### ENHANCED MOBILE SOURCE INSPECTION/SMOKING VEHICLE PROGRAM

In FYE 2015, this program achieved a final cost-effectiveness of \$307,739 per ton of emissions reduced. This is a result of a conservative evaluation that is based on the completed repair of 82 vehicles. For comparison, in FYE 2014 the program completed the repair of 88 vehicles (31 diesel vehicles and 57 gasoline vehicles) and achieved a cost-effectiveness of \$277,236 per ton of emissions reduced. The difference in cost-effectiveness can be attributed primarily to the number of repaired vehicles.

<sup>(</sup>b) Consistent with the current California Air Resources Board methodology to calculate cost-effectiveness for the Carl Moyer Program (CMP), PM tail-pipe emissions were weighted by a factor of 20 to account for their harmful impacts on human health.

<sup>(</sup>c) Emissions reduced from the bicycle facility projects were determined using the default cost-effectiveness value of \$90,000 per ton of emissions reduced.

<sup>(</sup>d) Four of six projects were cost-effective.

<sup>(</sup>e) Total FYE 2015 program cost was \$7,124,948, which includes funds from CMP, Mobile Source Incentive Fund (MSIF), and TFCA.

<sup>(</sup>f) Total may vary due to rounding.

<sup>&</sup>lt;sup>2</sup> Lifetime reduction in carbon dioxide from the Enhanced Mobile Source Inspections/Smoking Vehicle and Vehicle Buy-Back Programs are not included in the total amount.

Alternatively, if we assume 17.5%<sup>3</sup> (549 vehicles) of all smoking vehicle complaints had repaired their vehicles, then this would result in a cost-effectiveness of \$45,925 per ton of emissions reduced.

Staff is exploring options to refine the methodology that is used to evaluate this project type in order to ensure that all emission reductions are captured.

#### SHUTTLE PROGRAM

Overall the Shuttle Program, consisting of six projects that closed in FYE 2015, achieved a total cost-effectiveness of \$95,398 per ton of emissions reduced.

Four of the six projects in this category met the established cost-effectiveness cap for the program and two projects did not.<sup>4</sup> For both projects that exceeded the established cost-effectiveness threshold, the Project Sponsors reported that their project did not result in the number of mode shifts from single-occupancy vehicles that they had anticipated would occur during the project's term.

Over time, the cost-effectiveness of trip-reduction projects, and specifically shuttle projects, has been (negatively) affected as the Bay Area's fleet becomes increasingly cleaner. For the past two years, Air District staff has conducted extensive outreach to solicit input from trip-reduction project stakeholders and interested parties to obtain their feedback on options for meeting this challenge. Based on this feedback, staff has proposed annual increases to the cost-effectiveness threshold for shuttle projects, which has gone from \$90,000 (for projects that were awarded funding before FYE 2013) to the current threshold of \$175,000/ton of emissions reduced for existing projects and up to \$200,000/ton of emissions reduced for existing projects in Air District designated Community Air Risk Evaluation (CARE) areas and Priority Development Areas. This change has allowed a greater number of shuttle service projects to remain eligible for funding. Additionally, in May 2015, the Air District's Board of Directors approved funding for a new program category that will provide funding for innovative and cost-effective pilot projects that provide first- and last-mile connections. The resulting Pilot Trip Reduction Program is scheduled to open in early calendar year 2016.

<sup>&</sup>lt;sup>3</sup> Out the 3,136 Smoking Vehicle Complaints in FYE 2015 only 468 responded to the survey; of those who responded 82 (17.5%) reported making repairs.

<sup>&</sup>lt;sup>4</sup> For the purpose of this report, the shuttle projects that closed in FYE 2015 had a cost-effectiveness cap of \$90,000 per ton of emissions reduced for existing projects began in FYE 2012 and a cap of \$175,000 per ton of emissions reduced for existing projects began in FYE 2014.

# APPENDIX A: TFCA Regional Fund Projects and Air District Programs Concluding in FYE 2015

Project #	Sponsor	Project Title	C/E - Weighted (\$/ton)	TFCA \$ Expended		
08BFP04	Successor Agency to Richmond Community Redevelopment Agency	Barrett Avenue Bicycle Lane	\$90,000.00	\$20,218.10		
09BFP12	SF Municipal Transportation Agency	San Francisco Citywide Bicycle Racks Installation	\$90,000.00	\$83,760.00		
09R25	Waste Management of Alameda County, Inc.	(31) CNG Refuse Trucks	\$21,005.04	\$476,000.00		
09R44	Pacific Gas & Electric	(46) E-PTO Hybrid Utility Trucks Demonstration	\$186,388.55	\$310,952.69		
12R19	SF Municipal Transportation Agency	82X	\$383,536.00	\$122,000.00		
13BR004	Sausalito Marin City School District	Year 1 - BRVP	\$90,000.00	\$4,200.00		
13BR014	UC San Francisco Medical Center	Year 1 - BRVP	\$90,000.00	\$12,000.00		
13BR015	Larkspur-Corte Madera School District	Year 1 - BRVP	\$90,000.00	\$6,720.00		
13BR017	Fremont Unified School District	Year 1 - BRVP	\$90,000.00	\$1,680.00		
13BR022	City of Morgan Hill	Year 1 - BRVP	\$90,000.00	\$360.00		
13BR026	Livermore Valley Joint Unified School District	Year 1 - BRVP	\$90,000.00	\$2,520.00		
13BR028	Alameda County General Services Agency	Year 1 - BRVP	\$80,625.00	\$3,440.00		
13BR029	Jordan Middle School	Year 1 - BRVP	\$90,000.00	\$7,200.00		
13BR030	Palo Alto High School	Year 1 - BRVP	\$90,000.00	\$10,320.00		
13BR031	City of Novato	Year 1 - BRVP	\$90,000.00	\$3,240.00		
13BR033	City of Pittsburg	Year 1 - BRVP	\$90,000.00	\$1,440.00		
13BR035	City of Sausalito	Year 1 - BRVP	\$90,000.00	\$3,600.00		
13BR036	City of Richmond	Year 1 - BRVP	\$90,000.00	\$1,920.00		
14R07	City of Oakland	City of Oakland Broadway Shuttle	\$101,332.00	\$219,518.00		
14R09	Alameda County	Bay Fair BART Shuttle	\$165,294.00	\$16,400.00		
14R12	San Joaquin Regional Rail Commission	Shuttle/Feeder Bus	\$70,760.00	\$49,723.06		
14R14	Peninsula Corridor Joint Powers Board	Caltrain Shuttle Program	\$92,958.00	\$954,947.99		
14R16	Santa Clara Valley Transportation Authority	ACE Shuttle Bus Program	\$59,933.00	\$960,000.00		
14R18	Associated Students, San Jose State University	SJSU Ridesharing & Trip Reduction	\$18,794.00	\$120,000.00		
15BR001	Los Altos High School	Year 2 - BRVP	\$90,000.00	\$4,800.00		
15BR004	Fremont High school	Year 2 - BRVP	\$90,000.00	\$2,640.00		
26	Projects	Subtotal Projects:				
FYE 2015	BAAQMD	Smoking Vehicle Program/Enhanced Mobile Source Inspections	\$307,739	<b>\$3,399,599.84</b> \$2,162,193.19		
FYE 2015	BAAQMD	Spare the Air	\$17,611.60	\$1,176,363.25		
FYE 2015	BAAQMD	Admail for Vehicle Buy-Back (TFCA portion) <sup>a</sup>	-	\$124,947.85		
3	Programs	Subtotal Air District Programs:				
FYE 2015	BAAQMD	TFCA Regional Fund Administration <sup>b</sup>	-	\$765,100.96		
Subtotal TFCA Regional Fund Administration:						
GRAND TOTAL:						

<sup>(</sup>a) Total FYE 2015 program cost (which includes funds from CMP, MSIF, and TFCA) was \$7,124,947.85.

<sup>(</sup>b) Sixty percent of the total administrative and audit costs expended in FYE 2015.