

**AGENDA: 4** 

#### Bay Area Air Quality Management District Mobile Source Committee

June 30, 2016

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

> Damian Breen Deputy Air Pollution Control Officer



#### AIR QUALITY MANAGEMENT DISTRICT

## **Overview**

- Background
- Proposed projects with awards over \$100,000
- Adopt resolution for Fiscal Year Ending (FYE) 2016/17 Low Carbon Transportation and Fuels Investment/Air Quality Improvement Program (LCT & AQIP) – Green House Gas Reduction Program (GGRGF) funds
- Recommendations

Allocations Over \$100k



## CMP, MSIF, & TFCA

### • Carl Moyer Program (CMP)

- Created in 1998 to reduce emissions from heavy-duty engines
- Voluntary program that funds surplus emission reductions

#### • Mobile Source Incentive Fund (MSIF)

- AB 923 allowed for additional \$2 motor vehicle registration fee surcharge (12/04)
- CMP and LESBP projects eligible for MSIF funding

#### • Transportation Fund for Clean Air (TFCA)

- Funding provided by a \$4 surcharge on motor vehicles
- Statutory authority for the TFCA and requirements of the program are set forth in California Health and Safety Code Sections 44241 and 44242



## **CMP Year 17**

#### • On 2/18/15 District Board of Directors:

- Approved participation in CMP Year 17
- Authorized Executive Officer/APCO to execute contracts and amendments with grant awards up to \$100,000

### • CMP Project Recommendations over \$100k:

- 2 Projects to reduce emissions from 5 pieces of off-road equipment
- ▶ \$1,010,465 in total awards
- Emission reductions: Over 7.3 TPY of criteria pollutants







## **TFCA FYE 2016**

### • Air District Board of Directors:

- Allocated \$24.47 million and authorized Executive Officer/APCO to execute contracts and amendments with grant awards up to \$100,000, 5/6/15
- ➤ Adopted policies and evaluation criteria on 5/6/15 and 7/29/15

#### • TFCA Project Recommendations over \$100k:

- > 1 project to install 20 eLocker quads, accommodating 80 bicycle
- ➢ 3 projects to purchase 36 zero-emission trucks & busses
  - 11 zero-emission battery electric trucks, scrap 1 Model Year (MY) 2004 truck
  - 15 zero-emission battery electric buses
  - 10 hydrogen fuel-cell electric buses, scrap 10 MY 2002 buses
- Proposed total awards: \$1,685,979
- Emission reductions: Over 6.21 TPY of criteria pollutants, ~963 TPY of tailpipe greenhouse gas (GHG) emissions



## **TFCA Funds**

# by Project Category and by County (Eligible projects evaluated between 7/1/15 and 6/7/16)



Allocations Over \$100k



## **Resolution for ARB Greenhouse Gas Reduction Funds (GGRF)**

April 14, 2016 – ARB informed District of awards under Zero-Emission
 Truck & Bus Pilot Commercial Deployment Project solicitation for GGRF

Projects	District TFCA Match	ARB Funding
AC Transit – Replace 10 MY 2002 buses with hydrogen fuel-cell buses	\$1,000,000	\$22,347,502*
<b>Goodwill</b> – Purchase 11 battery-electric trucks, scrap 1 MY 2004 HD truck	\$151,430	\$2,738,557

- Receipt of ARB funding is contingent upon:
  - ➢ ARB's approval of FY 2016/17 LCT & AQIP Funding Plan
  - Appropriation of sufficient FY2016/17 LCT & AQIP funds before 7/1/16
  - Air District Board resolution committing matching funds

\* ARB funding includes administrative costs for Center for Transportation and the Environment, and transit buses for South Coast AQMD and Orange County Transportation Authority



## Recommendations

#### **Recommend the 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;
- Accept and obligate California Air Resources Board (ARB) Low Carbon Transportation Greenhouse Gas Emission Reduction Funds (GGRF) grant funding for zero-emission truck and bus pilot commercial deployment projects;
- 3. Adopt a resolution that authorizes the Air District's acceptance, obligation, and expenditure of GGRGF funds; and
- 4. Authorize the Executive Officer/APCO to enter into agreements for the recommended CMP and TFCA projects and with the ARB and partners for the acceptance and expenditure of GGRF funds.

Allocations Over \$100k



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#### Bay Area Air Quality Management District Mobile Source Committee

June 30, 2016

Accept, Obligate, and Expend Funding from the Bay Area Clean Air Foundation (Foundation) and from the United States Environmental Protection Agency (EPA)

> Damian Breen Deputy Air Pollution Control Officer



## **Overview**

- Background
- New Air District Funding:
  - Bay Area Clean Air Foundation Projects
  - United States Environmental Protection Agency (EPA) Project
- Recommendations



## Bay Area Clean Air Foundation (Foundation)

- On July 9, 2008, the Air District Board of Directors approved the establishment of an Air District non-profit foundation
- Foundation serves to fund various air quality emissions reduction, and educational and service programs to support the mission of the Air District



## **Foundation Projects**

- \$500,000 in Reformulated Gas Settlement funds:
  - For project to install publicly available electric vehicle charging stations (May 12, 2015)
  - Match with \$692,233 Air District TFCA funds
  - 11 projects approved for award by Board of Directors on 2/17/16
- \$472,262.70 from Faria Preserve, LLC
  - For project to implement an off-site mitigation program to reduce 13.64 tons of ozone precursors (April 12, 2016)
  - Vehicle Buy Back or similar projects



## **United States EPA Project**

- April 20, 2016 Air District submitted proposal to EPA to replace 3 switcher locomotives
  - Locomotives operate in goods movement near impacted communities
    - Two locomotives operate at Port of Richmond
    - One locomotive operates at Port of San Francisco
- June 8, 2016 EPA informed Air District of \$1 million award
- Emission Reductions over 28-year life of project:
  - 11.7 tons of NOx, 0.597 tons of hydrocarbons, 0.254 tons of PM
- Air District to provide Proposition 1B Goods Movement Bond funds as match

Bay Area Clean Air Foundation/EPA Projects



## Recommendations

#### **Recommend the Board of Directors:**

- Adopt a resolution authorizing the Bay Area Air Quality Management District (Air District) to accept, oblige, and expend up to \$972,262.70 from the Bay Area Clean Air Foundation (Foundation) for electric vehicle and vehicle buyback projects;
- Adopt a resolution authorizing the Air District to accept, oblige, and expend up to \$1 million in funds from the U.S. Environmental Protection Agency (EPA) to replace three locomotives; and
- 3. Authorize the Executive Officer/APCO to enter into all agreements necessary to accept and expend this funding.



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#### Bay Area Air Quality Management District Mobile Source Committee

June 30, 2016

**Emissions Reduction from Air District Grant Programs** 

> Damian Breen Deputy Air Pollution Control Officer



## Overview

- Background
- Recap of 2015 allocations
- Emissions reduction and emissions inventory
- Questions





#### **Results of District grant funding programs in CY 2015:**

 \$60 million (M) allocated to projects that reduce emissions from mobile sources (\$51 M awarded directly by Air District)





## **2015 Emission Reductions**

• Over project term, 2015 projects will reduce 521 tons criteria pollutants annually: Reactive organic gases (ROG), Nitrogen oxides (NOx), and Particulate matter (PM10)



Removal of 160,000 passenger cars



Or Removal of 1,300 port trucks

• Also reduce more than 75,000 tons of greenhouse gases annually



## Mobile Source Emissions Inventory

#### 2011 BAY AREA MOBILE SOURCE EMISSIONS INVENTORY\*



Locomotives (3%)

Ships & Boats (11%)

Other Off-road (20%)

Passenger Cars/LD Trucks (27%)

MD. & HD Diesel Trucks/Buses (36%)

\*NOx, ROG, and PM10

**Emissions Reduction** 

Grants projects reduce ~0.3% annually

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## Non-Mobile Source Emissions Inventory

#### 2011 BAY AREA NON-MOBILE SOURCE EMISSIONS INVENTORY\*

Petroleum Refining (2%)	
Other Industrial/Commercial Process (8%)	hese 5 rul
Organic Compounds Evaporation (24%)	es reduce
Combustion - Stationary Sources (27%)	-2.9% and
Miscellaneous** (39%)	Has your home taken up smoking this winter? Breathing wood smoke is unhealthy.
*NOx, ROG, and PM10	

\*\* Miscellaneous include Construction and Farming Operations, Paved and Unpaved Road Dust, Pesticides, Consumer Products (Excluding Pesticides), and Accidental Fires/Cigarette Smoking Emissions Reduction



#### **Emissions Reduction Projection from Grants and 3 Air District Rules**

Estimated Emissions Reduced by Grants/Selected Rules\*



\*NOx, ROG, and PM10 (tons per year)

**Emissions Reduction** 



## Grants in 2016 & Beyond

### **Expand funding for zero-emission transportation:**





- Light-duty vehicles and public charging Infrastructure
- Med- & heavy-duty on-/ off-road trucks and buses
- Off-road equipment: rail, marine vessels, ground support
- Trip reduction

**Emissions Reduction** 



## Questions

**Emissions Reduction** 

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**AGENDA: 7** 

#### Bay Area Air Quality Management District Mobile Source Committee

June 30, 2016

#### Fiscal Year Ending 2017 Transportation Fund for Clean Air (TFCA) Regional Fund Policies

Damian Breen Deputy Air Pollution Control Officer



- Background
- Transportation Fund for Clean Air (TFCA)
   Regional Fund Policies,
   public input process, and
   proposed Fiscal Year
   Ending (FYE) 2017
   polices and revisions
- Recommendations















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## Background

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

- Funded by \$4 motor vehicle registration fee surcharge
  - 60% to Regional Fund & Air District-sponsored projects
    40% to County Program Manager Fund
- Statutory authority and requirements of the program are set forth in California Health and Safety Code Sections 44241 and 44242
- Board adopts policies and evaluation criteria annually
- TFCA is the sole funding source that can be used to fund **trip reduction and light-duty alternative fuel vehicle-based** projects



## FYE 2016 TFCA Regional Fund Funding and Policies

- 3/16/2016, Air District Board of Directors:
  - Authorized allocation of \$21.7 million in FYE 2017 funding
  - Authorized Executive Officer/APCO to enter into funding agreements and contracts up to \$100,000.
- FYE 2017 Policies Process and Timeline:
  - February March: Draft policies out for public comment
  - July: Proposed policies to Board for approval
  - Beginning July 2016 (tentative): Open call for projects (issued in phases throughout FYE 2017)



## **Public Input Process**

- Public Comment Period: February 8 to March 11, 2016
- Policies posted on District Website; notification sent to TFCA grants e-mail list (more than 800 stakeholders including Congestion Management Agencies)
  - > Stakeholder workshops/meetings:
    - □ February 16 & 24: 26 attendees
- 14 sets of comments received (Attachment C)
- Staff follows up by email/phone with all commenters



## **Proposed Revisions**

- **TFCA Cost effectiveness (#2):** Increase cost-Effectiveness (C/E) thresholds for trip reduction and bicycle projects
- Light-Duty Zero- and Partial-Zero Emissions Vehicles for Fleets (#23) and Heavy-Duty Zero Emissions Vehicles (#24): Replace incremental cost limitation with a requirement that project sponsors must pay for at least 10% of a vehicle's cost after all other grants and applicable manufacturer and local/state/federal rebates and discounts are applied



## **Proposed Revisions** (Continued)

- Shuttle/Feeder Bus Services (#28): Remove a waiver provision, which provided a three-year grace period to sponsors of projects that duplicate existing local service, during which they would either need to become financially self-sustainable or come into compliance with all TFCA policies
  - □ Waiver expires December 31, 2016
- **Pilot Trip Reduction Projects (#29):** Increase the allowed time period to three years (from two) that pilot projects must become financially self-sustainable



## **Proposed Revisions** (Continued)

#### • Bikeways (#32):

Add requirement that projects must have completed all applicable State and federal environmental review

Clarify that eligible projects must be described in an adopted countywide transportation plan, city general plan, or area-specific plan, so long as the plan specifies that the purpose of the bikeway is to reduce motor vehicle emissions or traffic congestion



### Recommendation

#### **Recommend Board of Directors:**

 Approve the proposed Fiscal Year Ending 2017 TFCA Regional Fund Policies and Evaluation Criteria presented in Attachment A.