Bay Area Air Quality Management District
Mobile Source Committee

September 24, 2015

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

Damian Breen
Deputy Air Pollution Control Officer
Overview

• Background

• Proposed projects with awards over $100,000

• Recommendations
• **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
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:
- 7 Projects to reduce emissions from 12 tractors, 1 loader, and 9 marine engines
- $1,160,520 in total awards
- Emission reductions: Over 9.5 TPY of criteria pollutants
CMP and MSIF Funds
Awarded as of 9/7/15

Allocations Over $100k
CMP and MSIF Funds
Awarded since 2009

Allocations Over $100k
CMP Outreach Efforts

- Postcard mailing to over 5,700 stakeholders
- Email announcements/updates
- Industry/groups: Airports, farm bureaus, trucking groups, contractors’ associations, chambers of commerce, public agencies, vintner’s associations, etc.
- Press releases to highlight projects and funding opportunities
- Calls to potential applicants, industry groups
- Information at Air District public events
- Presentations at ARB regulation training sessions
- Program factsheets & flyers
- Website postings/updates
- Quarterly Air District newsletter updates
- Vendor coordinated outreach
Off-road Equipment Vendors

- 30 contracted off-road equipment vendors
- Vendors provide equipment for agriculture, construction, and industrial applications
- Vendors are trained and assist with outreach, application assistance and program implementation
- Any Bay Area off-road equipment vendor can participate
- **Vendor list:** [www.baaqmd.gov/ERP](http://www.baaqmd.gov/ERP)
Truck/Retrofit Vendors

- 26 contracted truck/retrofit vendors
- Vendors are trained and assist with outreach, application assistance and program implementation
- Any Bay Area truck/retrofit vendor can participate
- **Vendor list:** [www.baaqmd.gov/VIP](http://www.baaqmd.gov/VIP)
Air District Surveys

• Truck owner survey
  ➢ *Purpose:* to collect program participant feedback on Air District grant program processes and outreach methods.
  ➢ Conducted in March-April 2015
  ➢ 219 respondents

• Off-road vendor survey
  ➢ *Purpose:* to collect feedback from participating vendors on Air District grant program processes and outreach methods.
  ➢ Conducted in July-August 2015
  ➢ 38 respondents
• Approvals by District Board of Directors:
  - Allocated $24.47 million in TFCA funding for eligible Air District-led and Regional Fund project categories, 5/6/15
  - Authorized Executive Officer/APCO to execute contracts and amendments with grant awards up to $100,000, 5/6/15
  - Adopted policies and evaluation criteria for the FYE 2016 TFCA funded projects on 5/6/15 and 7/29/15

• TFCA Project Recommendations over $100k:
  - One Project to install 39 electric vehicle charging stations at 37 multi-family dwelling property locations
  - Proposed award of $234,000
  - Emission reductions: Over 0.07 TPY of criteria pollutants
TFCA Funds
by Project Category and by County
(Eligible projects evaluated between 7/1/14 and 9/7/15)

Figure 1: Funding Distributed by Project Category
- Trip Reduction (Shuttles and Rideshare): 44.2%
- Alternative Fuel Infrastructure (CNG and Hydrogen): 34.8%
- PEV Program (Electric Vehicles and Chargers): 12.7%
- Bicycle Parking (Racks & Electronic Lockers): 8.4%
- Alternative Fuel Infrastructure (CNG and Hydrogen): 34.8%

Figure 2: Funding Distributed by County
- Santa Clara: 32.1%
- Sonoma: 3.7%
- Alameda: 20.3%
- Contra Costa: 9.4%
- San Mateo: 27.5%
- San Francisco: 3.0%
- Marin: 2.4%
- Napa: 0.8%

Allocations Over $100k
TFCA Outreach Efforts

- Email announcements and website postings & updates
- Industry/groups: transit agencies, congestion management agencies, EV & charging station manufactures & providers, bicycle equipment vendors, cities, counties, special districts, regional & state agencies, advocacy groups
- Webinars: informational and program-specific
- Presentations at CEC, CPUC, Clean Cities, EV Coordinating Council, Regional & County working groups
- Public events, meetings and conferences
- Program factsheets & flyers
- Quarterly Air District newsletter updates
- Vendor coordinated outreach
Recommend the Board of Directors:

1. Approve CMP and 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.
Bay Area Air Quality Management District
Mobile Source Committee

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Participation in Year 5 of the California Goods Movement Bond Program

Damian Breen
Deputy Air Pollution Control Officer
Overview

• Background
• Year 5 I-Bond Program
• Recommendations
• Goods Movement Program (I-Bond)

- Approved in November 2006
- $1 billion to quickly reduce emissions and health risks from freight movement
- Bay Area trade corridor allocation - $140 million
- The Air District has administered GMP funding for the Bay Area trade corridor for the first four years of the program
Background

• Over $80 million expended during the first four I-Bond funding cycles for projects to:

  ➢ Retrofit 1,400 port trucks,
  ➢ Replace over 560 port trucks,
  ➢ Retrofit 65 on-road trucks,
  ➢ Replace 850 on-road trucks (in progress), and
  ➢ Electrify 12 berths at the Port of Oakland (shore power)

• Collectively these projects reduced over 238 tons of PM and 9,347 tons of NOx
Background

Prior Air District I-Bond expenditures by equipment category

- Shore power, $17,838,271, 22%
- Port trucks, $23,655,135, 28%
- On-road trucks, $41,922,094, 50%
Eligible Equipment Categories

- Heavy-duty truck projects
- Locomotives
- Transportation refrigeration units
- Shore power & cargo-handling equipment
- Commercial harbor craft

ARB Priorities for Year 5

1. Zero and near zero-emission truck technologies
2. Small truck fleet opportunities
3. Zero-emission equipment
4. Tier 4 locomotives
I-Bond Year 5: Application

• On-road trucks
  - $24 million requested in project & admin funds
  - ~507 truck projects
  - Emission reductions: 3,577 tons of NOx
  - Priority for zero and near zero-emission trucks

• Locomotives
  - $15 million requested in project & admin funds
  - ~7 locomotive projects
  - Emission reductions: 64 tons of PM and 1,062 tons of NOx
  - Funding prioritizes Tier 4 locomotive technology
I-Bond Year 5: Application

• Transportation refrigeration units (TRU)
  - $3 million requested in project & admin funds
  - ~66 TRUs
  - Emission reductions: 3 tons of PM and 106 tons of NOx
  - Zero-emission TRUs

• Ships at berth & cargo handling equipment
  - $5 million requested in project & admin funds
  - ~4 pieces of cargo-handling equipment
  - Emission reductions: 3 tons of PM and 296 tons of NOx

• Note: Funding amounts may be shifted based on interest/demand
Year 5 Schedule

- **August 4, 2015:** Application submitted to ARB
- **September 14, 2015:** Truck solicitation opened *(with existing funds from older grants)*
- **September 24, 2015:** ARB Board considers district allocations for new funds
- **October/November 2015:** ARB sends out Grant Agreements
- **Late 2015/early 2016:** Solicitation periods open for other equipment categories
Recommendations

Request the Committee recommend the Board of Directors:

1. Adopt a resolution in support of the Air District’s application for Year 5 Goods Movement Bond funding;

2. Authorize the Executive Officer/ APCO to enter into agreements with the ARB related to the acceptance of I-Bond funding; and

3. Authorize the Executive Officer/ APCO to appropriate I-Bond funding and to enter into agreements with eligible applicants for projects ranked and approved by the ARB.
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Allocation to support Greenhouse Gas Emission Reduction Fund Projects

Damian Breen
Deputy Air Pollution Control Officer
Overview

• Background
• Project descriptions
• Air District commitment
• Recommendations
Background

• ARB Low Carbon Transportation Greenhouse Gas Emission Reduction Fund (GGRF)
  ➢ Established in 2012
  ➢ Cap-and-trade funds for long-term, transformative efforts to improve public health and develop a clean energy economy
• SB 535 directs GGRF funds to CalEnviroScreen disadvantaged communities
  ➢ at least 25% of funds to projects that benefit these areas
  ➢ at least 10% of funds to projects located in these areas
• ARB FY2014-15 Air Quality Improvement Program (AQIP) and GGRF Investment Plan
  ➢ $23,658,500 for zero-emission drayage truck demonstration project
  ➢ $23,658,500 for multi-source facility demonstration project
  ➢ Deadline for project proposals is September 24, 2015
Zero-Emission Drayage Truck Demonstration Project

- Local partnerships with truck operators, technology providers, Port of Oakland
- Air district partners (SCAQMD, SJVAPCD, SMMAQMD, and SDAPCD) as part of a larger technology demonstration that includes trucks at the Ports of LA/Long Beach
- SCAQMD is the lead on the joint-application
- Bay Area: Project will demonstrate zero- and near zero-emission trucks serving the Port of Oakland
  - Battery-electric trucks operating on short routes
  - Hybrid-electric trucks operating on longer regional routes to Sacramento or San Joaquin Valley
- $23,658,500 requested from ARB for joint project
Multi-Source Facility Demonstration Project

• Demonstration of zero or near-zero technologies at a single freight facility

• Project will demonstrate zero-emission equipment operating at the Port of Oakland
  ➢ Battery electric trucks operating on shorter routes
  ➢ Hydrogen fuel cell rubber-tire gantry cranes
  ➢ Cryogenic Transportation Refrigeration Units (TRUs)
  ➢ Battery electric yard trucks

• Local partnerships with terminal operators, technology providers, Port of Oakland with Air District as lead applicant
Air District Commitment

- Applications were submitted by September 24, 2015
- 25% required match for each application
  - At least 10% cash match
  - Max 15% in-kind match
- Staff proposes a $4.65 million TFCA allocation
  - $3.15 million remaining from 2014 truck allocation ($5 million)
  - $1.50 million from FYE 2016 TFCA EV Program allocation
  - Covers the cash match for both applications, but may be used to expand one project if only one proposal is successful
  - If successful, TFCA funds could leverage more than $40 million
  - No funds will be used if both projects are unsuccessful
Recommendations

Request the Committee recommend the Board of Directors:

1. Adopt a resolution in support of the Air District’s application for California Air Resources Board Low Carbon Transportation Greenhouse Gas Emission Reduction Funds (GGRF);

2. Allocate up to $4.65 million in TFCA funding as match for GGRF projects using a project cost-effectiveness of $500,000 per ton of emissions reduced;

3. Authorize the Executive Officer/APCO to enter into agreements with the ARB and partners related to the acceptance of GGRF funds; and

4. Authorize the Executive Officer/APCO to appropriate GGRF funds and to enter into agreements with project participants.